FIG. 1

FIG.2

Location of haplotypes showing association
(p value< 10^{-5}) with the disease
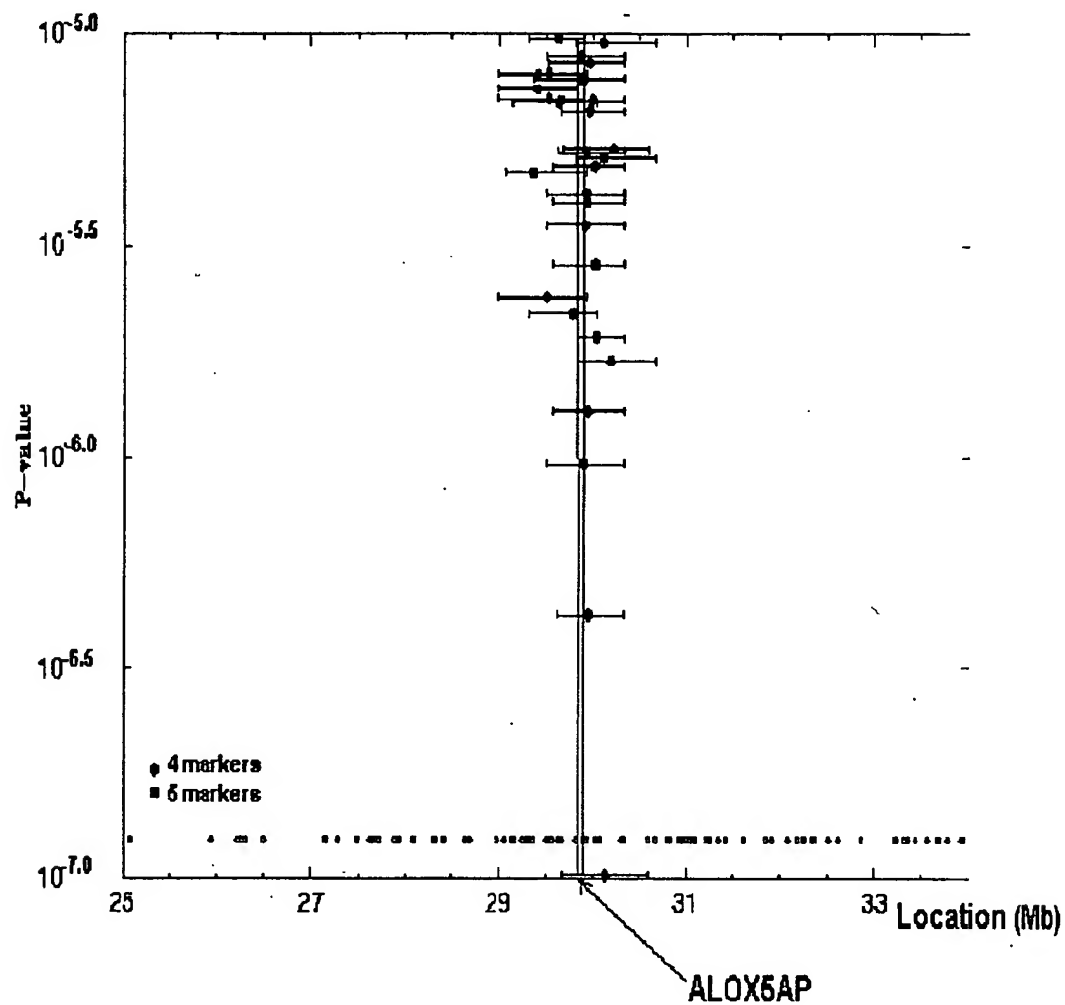

FIG. 3.1

Haplotypes showing association (p value< 10^{-5}) with the disease
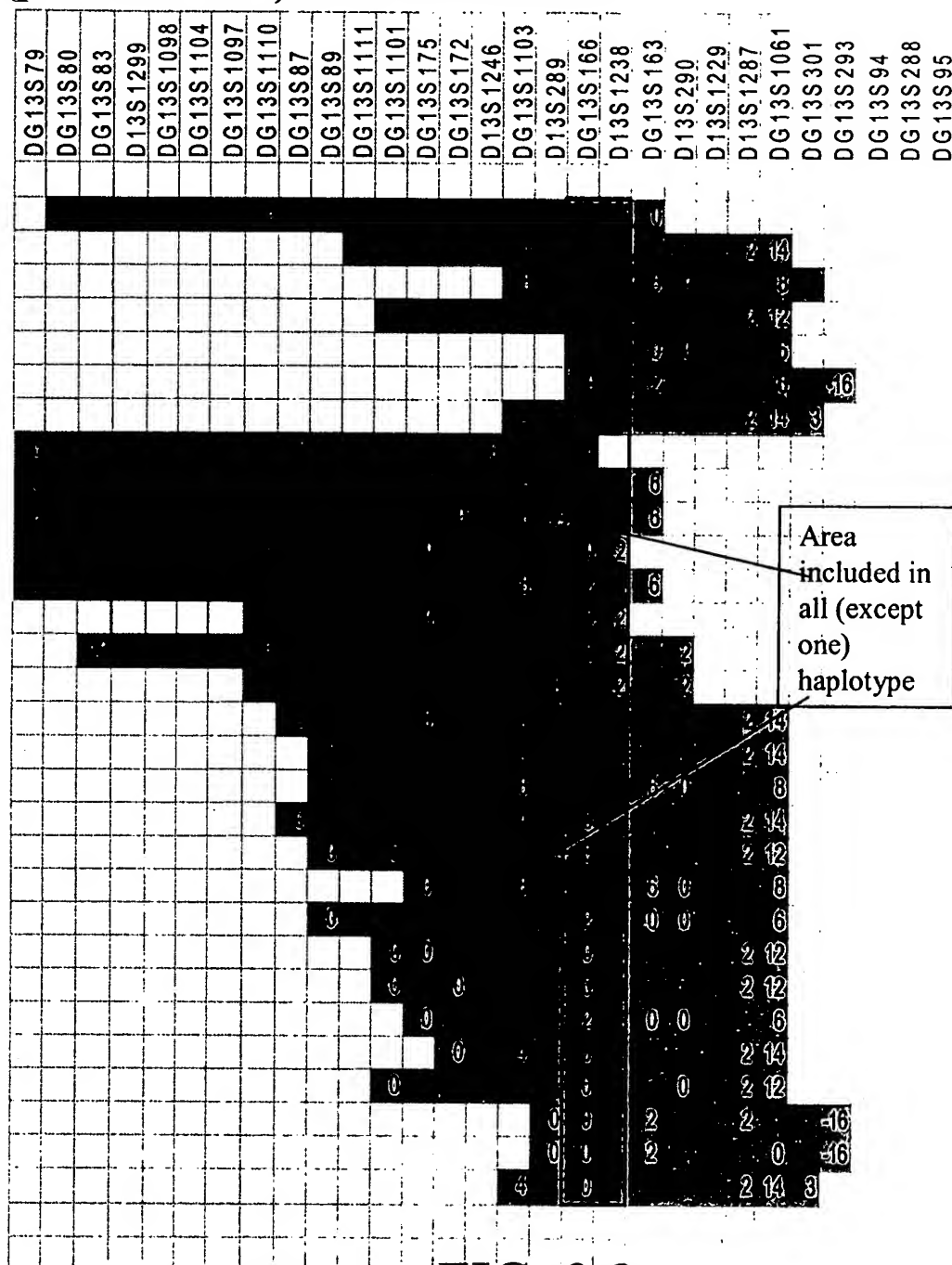

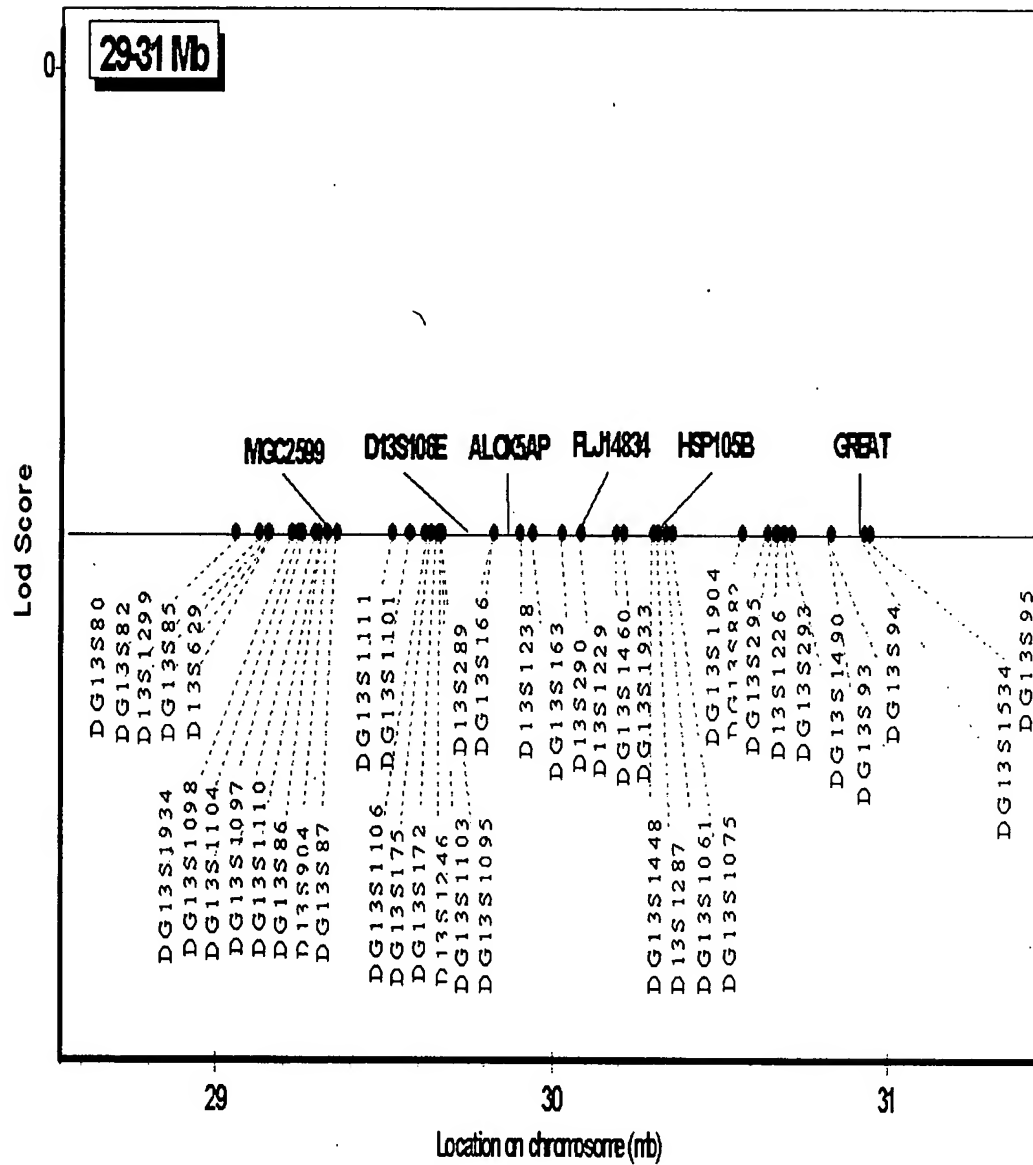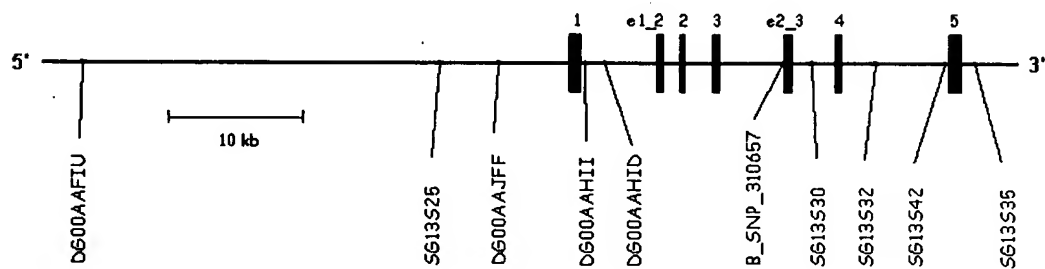FIG. 3.2

Markers and genes around the FLAP gene

FIG. 4

FIG. 5 Relative location of key SNPs and exons of the ALOX5AP/FLAP gene (exons shown in vertical rectangles). Haplotype length varies between 33 to 68 kb.

ID CHROMOSOME 13: 28932001-29146000BP in NCBI build 34.

SQ Sequence 214000 BP

```
GACTAAGATG AATATGCATT CATTCACCAA AATCTCATAT TCCCAAAAAG CAGGAAAGGT    60
AGTACAGTGA GATGGATGAT GCCTTCACAT GACTCAGATG TCACGTGTTT CTCACCATTG   120
AGACCCCCAA GGCACCCCCT CCCAGCATTT ACCAGAATGT GTGTGTAACT ATTTACAGTG   180
ATTTGTGTAA TTATTTGATT GTTTCTCTTG TATCCTGTAG CAATGAGGGT AGAGATTATA   240
TCCCACCTAC CACTGCAGCT CCAGGATCCA GCTTCACAAA CATTTGTTGA ATGAATGAAT   300
AAGAAAAGAG GACACCCCCA AAGAGGCTGC AAGGGAAAAA GCTACAAAGA CAGAAGCACC   360
AGGAAAAAGT AGGGTCATGT AAGTCAAAGC AGGAAAAAAG TTCCATGGTG GGGTGGTCAG   420
CAGTGTCTAA TGCCACGAAG GCACAAAGTA GGATAAAGGT TAAAAATCAG CCTTTGGTTT   480
TGGCAAATAT GAAGCTTATC GGTAGCCTTA GCGAGAACAA TTCCATCAGG GAGCAGAAGC   540
TAACTGCAGT GGGTTGAGTC ATCAAGCAGG CATAAGGAAG TAGGGATACC CCATTATAAG   600
CTACTCTTTC AAGAAGCTCA AATCTGAAGG TTAGGAGAAT TAGGTCAGTA GCTAGAAGGA   660
AATGTGGAGT CGAGGGGCTG TTTTTCCTCC CAAGGAGTAT AAAGGTGTAA CGTTGCATGA   720
AACCACTTCA GACAAAGGCC GATATCAATA GAGAAGTTAA AACGCACGCC TCAAGATTTG   780
GGAAGGCTTG GGGTTGGGCT TAAAGAGGTA GGAGCATATT TCCTATCCTA GGACAGAGAA   840
TAAAGAAGAA AGGATAGGTT CCCATGGAGA TAAATTTCTA AGTGTTAAAG AAGAGGCTCA   900
GAAAATTCTA GCATGATAGG CTCACTTTTT TCTTTTTCCA TGAAGGAGAT GGCAAAGTCA   960
ACTGACATGA GAAAGGTGAC AATACTGATG GGTTGAAGAG CGATGGACAT TTGAAATAAC  1020
TTCTTAGACC AGTAGAGGCT GGAGTTCATA AATCAGAACT GGCTACAGGT TATATATGTT  1080
TTTTTTTTTT TCTCCAACAG CATAAGATAA CAGAGCGAAG TCTGTAGAAA TGAAAGAAGA  1140
GTCAGATGAG GATAGCTGGA GCTAGTGCAA GGAGGGAAGC ACCACGGTGG GAGCCAGGTA  1200
CCCCCTGGAT TTATAATTCA TACTGAATTC CAACAACAGA AGGGCTCTAA GCAGGAGAGT  1260
GACAGATTTC AGAAGACTGA GACACATTTG GTAAAAAAAA GTAGGAGGAA AACCTGATTC  1320
TGGAATTAGG GCAGCCAATA GACGGCAGTA TTTTCAGAAA GGAGGGAATG GTCAACAGTG  1380
ACTTTCTAGT CTGGAGCTCA GGAGGAAGAG GCAACTCTAC CTGATGGTAT TAAGATCATG  1440
GAGGTAGCTG AGATCACCTA GCTTGTGTGT GTCAAATGAG AAAAGAAGAA AGAATAGGAG  1500
AAGTTCCCCA GGAACACAGA CATTAAGTGG GGCTGTGGTG ACAACACAAG AAGAGAGGCT  1560
TGCAAAGGAG CCTGAGCAGC TGTCATGAGA GAGGTAGGAT GGTGGACTCG GAGAAGAGGC  1620
AGAAGATGTT CTTAAAGGAA GGACACTGCT GCCAAGTAGT CAGCCAATTG GTGACAAAGA  1680
AAGACCCTGT TGCGAGAAAA AAAGTCAGTG AAGTAGTAGG AACGATGACA GATGACACTG  1740
GGTTGAAGAC TGAGGAGAGA GAAGTGTAAG AGTGGAAGCA GAGGGCAGAC CACTCTTCTG  1800
AGACACTGAA GAGGCATAGT TAGAAATAAA GGGGAGTCGC CAGAAAGGAA TTTGTGGCTA  1860
AGCAAGAGGT TTTCTTTAAG ACTGAAATAC ATAAGCATGA TTTAAATGCT GCTGGGATGG  1920
AGTTCACAGA CCTGGAAGAC AGAAGACAAA GCGGATCATC AAGATAGTGG AATTTACTGA  1980
AATGAGAGAG GAAAATCCCA TCCACAGGAA ATGCAGACAT GAGGGAGGGG CCAGAAGGAC  2040
AGTGAAAACA TCAGCAACTG GTCCCCCAAC TTCTGAGTGA ATGTGGAGAT ATAATCAGGT  2100
AAAGGACTGC ATCATCTCCC TGGTTAATGA TGGAGTCAGA GAAAAGAGTG TCTTATACAG  2160
AAGTTGTGAT ATACTTGGCC GGGCGCAGTG GCTCACGCCT GTAATCTAAG CACTTTGGGA  2220
GGCCAAGGCA GGCGGATCAC CTGAGGTCAG GAGTTCATGA CTGGCCTGGT CAACATGGCA  2280
AAATCCCACC TCTACTAAAA ACAAAAGCCT GTAATCCCAG CTACTAGGGA GGCTGAGGCA  2340
GGAGAATCGC TTGAACCCAG GAGGCAGAGG TTGCAGTGAG CCAAGGTCGC ACCACTGTAC  2400
TCCAGCCTGG GCAACAGAGC TAGACTCAGT CTCAAAAAAA AAAAAAAAG ATGTATTTAT  2460
```

FIG. 6.1

```
TCTCACTGTA TAAATTTCTG TGTAAGAAAT ACTCTCTCAT ATAGAAGTAA ATTTATATAT    2520
AAAATTATAT AGAACCACTA TAAAATACTC AGGTTTATAA AATTTATATA TAAACTTGTT    2580
GACATATAAA ATTCCATGTA AATGACTATA AAGTACTCTT ATATGAAAAG TATATGAATT    2640
AAATTATATA TCAACTTACT TTTATATTAC AGTATTTTTG TTATACAGAA GTTTATATAG    2700
TGACAATAAA TATTTCTCAA GAACGATTTC ACATAATAGA AGTATAAATT ATCCATTTCC    2760
AATAGTGAAA AAGAAAAGCA GTTCCACACC AGTGACAGGG CTACGAATCT AAGAGGTACA    2820
AAGACTTCAT TCTTAGAGAC ACTGAGGTCA GGGCATGGCC AACACATCTG AAGCTGATAG    2880
AATTGGCGCT GGGTTGGTTG GAGACGGTAC GGTATTACTA TTACAATGGC AGACGCTTGG    2940
CCTTGATAAC TAGCCAATCA GGGGGAAAGA TTCTGGTTTC CTCTGTTATT ATCTGAACTA    3000
GTGTGTTCCC AAAGGGTTAA GATGGTTTAT GGAAGGCACA AGATCAGCAA ACCATAAAGG    3060
ATTAGCACTA AGAAGGAAGG AAGTAGACCA AGTGTTAATG GCGATGCCAT GTAAGAGCCA    3120
GGTCTGCGAT GTATGTTCTA CATGGTTTGG GGGGTAAAAA AAATGTCAGC CTCCAGAGCA    3180
CAGGGCTTTA AGCCTCAAGT ACTGTTAACA GTAGAGTTTA CTAGTCTACA GCAGGAATTA    3240
CAACCAGTAA TTCTAAGGCC AATTACTCAG GCAAGTTTTA CTAGAACAAG GAAGCTCTGC    3300
TTCGAGGTCA AATCGATTTC TGCATTTATA GAAGCATCTA GATGTTCTCT GTTCAAACAA    3360
TGGGGTAAAA TCCCCACACA TTTTATTTCT GACAGAGTGT TCCCTATATT GCCTGGCCAG    3420
GAGTGATAAC ATTGCTTGGC TATTATTAAT AAAACATTGC TGTGGCTGGG CGCAGTGGCT    3480
CACACCTGTA ATCCTGGCAC TTTGGGAGGC TGAGGCAGGA GGATCACTTA ACTCCAGGAG    3540
TTTGACAGCA GCCTGGGCAA CATAGCAAGA TCCCATCTCT CTAAAAAATT TTAAAATTAG    3600
CTGGGTGTGG TGGCAGACAC CTGTAGTCCC AGCTCCTCAG GAAGCTGAGG TGGGAGGATC    3660
ACTTGAGCCC AAGCAGGTTG AGGCTGCAGC GTGCTGTGAC TGTGCCACTG CACTCCAGCC    3720
TGCGCAACAC ACTGAGAGAG ACTCTGTCTC AAAAAAATAC ATCAAATAAA AATTAAAAGC    3780
CCATTTCTTT CTTTTGGTAC ATTACAGCCA TGCACTTCAA AGGCTAGCAC AATTATTTTT    3840
CTGCAGTTCT ATATTTAGAT TCTAGTTAGA AGTAACCTAG GACCTTCATG TTAGAGGTGT    3900
CTTTGGCAAA ACTGTTATGT GAGTGAAACG TTTAATCAAT TGAGGATAAA GATGCCTCAT    3960
TGCTAATGAA GATGTGGTTT AAGGATTTTA TGCACCCAGT TCATTATTA ACAACTTGTT    4020
TAAGCTTTAT TAGCTGGGTC TCTACTTTAT AACTGTGTTC TTTAATTTAC AAGACAATAA    4080
AAATTAAAAT GGTAAATGGG AAACCTATCT TGCTTTTCAA TAAATAATTT ATTTTAATAA    4140
CTTCGTGGGC ATGGTGGCCA AAACATTTTA GCTGTGAAAA TAATTTCAAT TCATATTTTT    4200
TTGGAATCAA TATTAAAAGG TGATATATTC TCAAATGAAA AGTGGACAAA TGATCAGTTA    4260
TAGGACATGA TTAAGAAACT AACCATGAGC CACGTGCAGT GGCTCATGCC TGTAATCCCA    4320
GCACTCTGGG AGGCCGCGGT GAGCGGATTG CTTGAGCCCA GGAGTTCAAG ACCAGGCTGG    4380
GCAACATGGC AAAAACCCGG CTCTACTAAA AATGCAAAAA AAAAAAAAAA AAAAAAAATT    4440
TAGCTGGGTT TTGGTGGCTT ATGCCTGCAG TCCCAGCTAC TCGGGAGGCT GACTCGGGAG    4500
GCTGAGGCAC AAGAATCATT TGAACCCAGG AGGCAGAGGT TGCAATGAGC TGAGAATACA    4560
CCACTGCACT CCAGCCTGGG CAACAGAGAG AGAGAGACTC AGTCTCAAAA AACAAACAAA    4620
CAAACAAACA AACCGCTGCC CTGTGCTTGG AGAGATCGT TTACCTTTAC CACTAAAGAC    4680
TGTTGGAAGT AAATTTTAGA AGGTTTATAA TACCTAAAAG TAATCACTTC TGTCTTATGA    4740
AAGGTTCTGC TGAGATTTTT CTATTGTGGC CACTAGTGGC AATATTCCAG AAGTCATATT    4800
TAAAGAATAT CTTTAGTGGA TTCAGCAGTT TTTCAAATAT GTACTTTTAT CTCTCCAACA    4860
TTCATGATTG CAATTTTTCA AATTAACCTC ATGATATAAA CAACTGTACT CTATGATGCC    4920
TCATAGTACA GAAACTGGAG GCAGAAAGAG AAGTTGAATG TCTAAGAATC GGTAATTCTA    4980
AAACTCAACA TAGACCATTC AGCATTAGTG GTTCTAACAA TCCCACTGCA AAATGAGTTG    5040
ATAATGTGTA ACACTTTAGT GAACTAAAGC ATAAAGAACC ATGGTCTCCT AATGCAGCAA    5100
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FIG. 6.2

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ATTAAAACAC ATGATAGCTA CAATTAATGA AGTACATAGT CCTGGCTGGG CACTATGGTA    5160
CGTCCTTTAC ATAGATTATC TCTTAAATTA TTAACCCCGT TTTAGAGATG AGAACATTCG    5220
GGCTCAGGAA GGTTATGTAA GTTATATAAA AATCACAAAA TAAGAGACAG AGCTAAGATT    5280
TGAATCCAAG TGTGACCAGG TTCATATCAA GCTTCCATTT TTGAATTTAT ATTAGAGGTC    5340
AATAACTCAC CTTTGTCCTT TTAAAATAAT TTTTGGCTCT GTGACCTACA CAGGCAAGCT    5400
GTTATTTACA AACAACCCAC ACATCTAGAT GGTCACTGTC TCACCGCCCA CTTTTACCAT    5460
CAGGACTCCT AGTGAGCTGT CAAGGGGAAT GCTATAATTT TGGAGGTTCT AAATCTGAGG    5520
GCTTAAGAAA GAAAGAAATT GTAAAAAGCA GGCATTACTC AGGGGCATAG ATTGTCAGGC    5580
AGATCTGTCA TGCTTATAGG TAACCTCCCA GGGCCAAAAA TATATGTGCC CAAACTGCCT    5640
AAATATTTCC TGTCACTTCA TAATACTGCC TGAAATCCTG CCAAATTAGA ACTTCATTTG    5700
TGTTGCTTGT CAATTTTTAA CGCATAAGCA AATCACCTGG AGATCTTGTT AAAATGCAAA    5760
TTCTGATTAG GTTAGGTCTG GGTCTGCATG TCTGATATGC TTCCAGAGGG CACTGATGCT    5820
GCTGGTCCAT GGACCACACT TAAAGAAGCA AAAAAGATGT CTGATATTTA CTCTCTGGCT    5880
GCCTAGGAGT GCTTCTCATT TAAGTGAGAT CTCTTTGTGC ATCATAATGG GAGGGATGAG    5940
CTGAAAAGCA GCAAATTAAG AGTGAGTTAA GTGTCTACCT CACTTCCCTA CTATCTGTAA    6000
CAAGCAGGTT TGGGCACTGT GGTCAACCAG AAAATTCTTT CCAGGACCAC AACCCTTGAG    6060
ATTATGTTGC AAAGATGCAA GGACAACTTA GAAATAATTT CCAGCACTGG TGGCACTGGA    6120
TGTCTGTCAG TGGTGCTGGT GGCAGGGTCC TATTCAGACT GTGGTTTACC TGCCTGGCCC    6180
GTTTGGTTAT GGGCCATTTT CTGAGTACCA TGGAGCATCG CCCAGCTGAC AAGGGCTTGT    6240
ACTCCACCCT TGGTGCGCAG AAGGGAAGCT TGGCTGCTAC TAAGTTTGGT GCAAAGTAAT    6300
TGTGGTTTTG CCATTAATAT TTGATACAGT GAGTCCCTAC TTTCCTCAGG TGAAACTAGA    6360
ACTTAAGGGG ACACGCTCAA GTTCTCATTA TACAGTACTA AGTTTCAAAA ATCAGCAATT    6420
TTATCAAACA CATGCTCTAC AGCAGTGGTC GGCAAACTTT TTCTGTAAGG GGCCAGAGAG    6480
TAAATGTTTT AGAGTTTCTG GGCCACATAT GGTTTCTGTT CCAGCTATAA ACTCTGCCAC    6540
TGTAGGGCAA AAGCAACCCT CCACAATACA TACATGAATA GGTGTGTTCC AAAAAAACTT    6600
TATTTGTGGA CCCTGAAATT TGAATTTCAT AAACTTTTCA TGTGTCATGA AATATTCTTT    6660
TGATTTTTTC CCAACCTTTT AAAGATGTAA CAACCATTTT TAGCCTGTAG GCCATATAGA    6720
AACAGGCAGT GGGCTGGGTT TGCTGACCCT TGCTCTGAAG CAATGATATC TCGATCCAAT    6780
TTATACCCAC AAATTTTTCT CCTTGAAACC ATGCATTTAA TTCTCATCTC TTCTTACCAT    6840
GACAATAAGA AGTTATTCTA TATAACAAAG AGATTGTACC CACCCAAGCC AGCATTTAGA    6900
TCATGTCATT TGCTTCCTCA AAATTTTGGT CTTTATAAAA ATCAATTAAA GCACCTTAAA    6960
AGGTAAGCAG TGATGAAATA TTTGAAATAA TTGGCTAATT AAACATCACC TAAATAGAAA    7020
CTGTGATAAG AACCACAAAT GCGAAAGGA ATCATGTAGT AACTAATGTG GAGGATATCT     7080
TGGTTTAGAG ATTTGATGAA CACGAGTTTT GATTTAAAAA AATTTGTGCA ATACTCACTG    7140
CTTTGGTGGG GAGCTTGCTA TGCAAGTTGG TAGAAAAATT TATCCTAAAG TCACAGTTCT    7200
CTACCACTCT GGATTTTCTC GAGCTAACTA CCATTCCAAA CTATTTTAGG CACAGTTACT    7260
AGTTTCAAGA ATCAGGCAAA TTGCCCTGGT ATTAGCACTG TTCTTTCTGT GGTCACAAGT    7320
CAAACTACTG TGGTGAATAA AATTAGATGA TTTCTTTAGT CTTTCCTTTT TCAGCCCCTG    7380
TAGTCAATTT CCAGTGCTCC ATTCAAAGAA AAACCAAAAA TGTCCAGAAT ATAACCTTAT    7440
TTTAAAACTT GTTAACCACT GATTTCACTT GTTAACCAAA TTTTTTTTTT TTTTTTTTTG    7500
AGAATGAATC TCACTCTGTC ACCAGGCTGG AGTGCAGTGG CATGATCTTG GTTCACTGCA    7560
ACCTCCGCCT CCTGGGTACT GGTTCAAGCA ATTCTCCTGC CTCAGTCTCC CGAGTAGCTG    7620
GGATTACAGG TGTGCACCCC CACACCCAGC TAATTTTTTT GTACTTTTAG TAGAGATGGG    7680
GTTTCACCAT GTTGGCCGGG CTAGTCTTAA ACTCCTGACC TCGTGATCCG CCCGCCTCGG    7740
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FIG. 6.3

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CCTCCCAAAG TGCTGGGATT GCAGGCATGA ACCACTGCGC CCAGCCTGTT AACCAAATTT   7800
CTAATCACAC ACACTTGAGG CCCAGTAAAT GCCTGCTGAA AAGAGGGTGC TGGTGGTGAG   7860
GCAACTGAGG GGCTAACATA CTGATAGCTG CTGAAATCTT CTACAGCTCT TTCTTGTTAG   7920
AACACTCCAT CACGGCTCCC AGGCCCACAC CACATGAAGG AACTTCTAGC TCTCTTGCTT   7980
GCTCTTTACC CAAATGTAGT TAGCAAGTCC TGGGAACTAA ACAGCATTGA CACACTTGAA   8040
GAAGACAATT AGGCAAATCC CAACTGCTGT GCTCCTGCAG CTAAAGATGA AGACTCGTCC   8100
ATTGGGCAGT TGATTAATTG TACCTAGAAA ATTAATTTCA ATGGTCCCAT GACAACATAC   8160
GGGCAGTGAA GCTCTAGTGT TCCCCCTGGG TGGAATCTTC CAGGATGTAT AGTCTCCCAT   8220
ACCAGCTCAT CCTCCCATTT TTCCAGATTC TGGTTCTTCT CTCTTACCTA GTGTGTAGTG   8280
GGCCAAATGG TGGTCCCCCA AAAAGATATG TCCATGTGTT AACCCTGGAA ACTGTGGATG   8340
TAACCTTATT TGGAAAAATG GGGCCAGGTG CAGTGGTGTG CATGTGTAGT CCCAGAACTT   8400
TGAGAAGCCA AGGTGGGAGA ATCGTTGGAG CCCAGGAGTT CAAGAACAGC CCAGGCAACA   8460
TATTGAGACC CCCGTCTCTA TAAGCAATAA AAAATTAGCT AGGTGTGGTG GCATGCACCT   8520
GAAGTTCCAG CTACTTGAGA GGCTGAGGCA GAAGGACTGC TCAAGCCCAA GGAGTTCAAG   8580
GCTGCAGTGA GCTATGATCA TGTCACCCCA CTCCAGCCTG GGTGACAGAG TCAGACTCCC   8640
TGTCTCAGGA GAAAAGAAAA AAAGGTCTTT GTAAATGTAA TAAAGAATCT TGAGATAAGA   8700
TCATCCTGAT TTAGGATGGA CCCTAAATCC AATGACATTT GTCCTTACAA AAGAAAGGTA   8760
GAGGGAACTG TGAGACAGAC ACAGAGGGGA GGGCCTTGTG AAGCAGGAAG CATAGATGCA   8820
GTTACAAGTC AAGGAATGCC AAGGACTGTC TACAACCAGA AGCCAGGAGA GATGCATGGG   8880
ATGATTTCTC CCTCACAGCC TCCAGAACTT CTGGCCTCCA GGACTGTGAA GAATCAATTT   8940
CTGTTGTTTT AAGCCACCAA GTTTGTGTGT CATTTGTTAT GGCAATGGCA GTATTAGGAC   9000
TCTAATACAC AGTATAAAAA AATAAAAATA GGGCCAGGCG TGGTGGCTCA GACCTATAAC   9060
CCCAGCACTT TGGGAGGCTA AGGCGGGGAG ATCACTTGAG GTCAGGAGTT TGAGACCAAC   9120
CAGGCCAACA TGGTGAAACC CCATCTCTAT TAAAAATAAA AATTAGTTGG GCATGGTGGT   9180
GTGCATCTGT AATCCCAGTT ACTCAGGAGG CTGAGGCAGA GAATCGCTT GAACCCAGGA   9240
AGTGGAGGTT GTAGTGAATG CCACTGCACT CCAGCCTGGG TGACAGAGCT AGACTCCTTC   9300
ATCCTAGGAC ACAGCCAAGT CTTACGTAGC AAAAAGAAGT TGTTAAAGGT CTGTAGTTCT   9360
GCATTAAGCA ACACAGGCAT GTACCTATGA ATTATATGAT TATAAAGTG CTCGGACAGG   9420
CCCATTTCAA ACTTGGCCTC TTTCCACCAA CTGTGTACTG TTTCTCATTC CATAACTAGA   9480
GATTATGTCT TTATATCCTG TCAAAAAGT GAATTTTTGT GGGCTAAGAC ATTATCCCTG   9540
TGTTAAATGC ACCAGTCTTA GTGTAAACAA GCCTAGTTCC TTTTTCATTT TGGCTGTCTA   9600
GTATGCATTT GTATATGCTA GGCAGTGTAC TAGGCACCTT AAATACATTA CCTTGTTTAA   9660
CCTCTACAGG ATTCTGGGAG GTAGGCATTA TCCCCATTTT ATAGATGAGA ACACTGAGAA   9720
GACAATGTTC ATAAGTGCGT CACTTGTCTG AGATGACATA TTTACTAAGT AGCAGAACCA   9780
GGCCTCGAGC TACTCAGTCT GATTTCCAAA GCCCCTGCTC TTAATCACAT CAACTTCTTT   9840
CCTATATCAC CTTTCCCAGA GTGCGCTCTC ATGGATAAAG AGCAGAAGTA TAAGTTACTA   9900
GGCAGCAGAA AACTGTAGAG GTGGGAAGAT TAGATAAAAA ATGTAAATAA GAAGGCTTTA   9960
AGACACCAAA ATCAAATGTA AATACTTTAT AACCTGAATC AGTGCTTGTG TTCATGAGGC   10020
TAGAGGTCGT GCATTTTATC TCTAGGTCTG GTGATGCCAA TCCTGATCTA CAGCCAGCAG   10080
CAACAGTTCC CTAGCCTGCC TAGAAGTTTG TAAATGCATG GGCTTTGGTA GGAGGAAGAC   10140
GAGAGAAAGC AGAACAGATT ATTACAAACC CAGTGCATTC CCCCTTGATG GGTCAACAGC   10200
GATTTCTTTG TAAGTGAAGG ACAGCACACT GGTTTTGATG ACTCACGAGA GAGTAGGAGG   10260
GAAAAAGAAG TCTGAGGCAT TGCCTGGAAG CCTCGCTCTG CTTAAACAAG TACACTAATG   10320
GCTCATGCCT GTTACTCCCA GCACTTTGGA AGGCCAAGAT GGGTGGATCA CTTGAGGCCA   10380
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FIG. 6.4

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GGAGTTTAAG CCCAGCCTGG TCAACATAGC GAGACCTTTT CTCTATTAAA AATAAAGAAG   10440
AAAGAAAGTA ATAATGATTC AAGTTCTCAT TCTCTACAAA ATTCACTTAT GACTTTCCAA   10500
ATGCTAGTGA AAACTTTTAG GTATTGCAAA ACTGCCTTAA TGCATAACGG GATTCTCATT   10560
TTACTTAGTC TAAGATGACT TTTTCACTTT GAACTTCTGC ATCTTTATGA TCGCTTAGCT   10620
TTCTGACAAG CAATTTCAGT AAGTGTTTAT CAATTTGCAT CCACACGCTG ACACATAGGG   10680
GTCTACTTAC ATATCCTTCA TGTAATTGAG CTTTTGTAAA TCATCTTTCT ACATGGTACA   10740
CTTCTGATTT TGTGTGCAGC TTTCTTGTTT AAGCACTGTA TTAAATGCTC TGCTTCCTAC   10800
ACCCTTAGGA ACAATGAGAA TAAAAGCGTA ATGTTGGTTA CTTCTTCATA TCAAAGGAAG   10860
TTCATCTCCT GGTTATTAAA AGCTATTATT AAATGGCCAT CTTTTTGTGC CCCTGTGTTA   10920
AGCACTCTAC CAAGATACCA TTAAATAGAT AAGGGCCACA CTCCATAGAG ATGATGGTTC   10980
TATATTCTGT ATTTTCTGGG GGAGTTCTAA TTTCATGCAA TTCCTTCTTC TTAAATAAAG   11040
GCAATTCTCT AAATATATTA CCTAATGTGC TTTCACTTTC ATATTCTTGT AAGATTTTTC   11100
ACATAAATCA ATTCTCAAAA AATAGTATCA TAGGCCTTTT AAAAATAGTC ATGTTCAAAA   11160
GTCAGGCTCA TGAATAAATG TGTGCATTCA TTACATATAT TTTCATAAAT TCAAATTTAA   11220
AAGAATAAGA GTAGCTAGAA GGTGGAAGAA AAATCTTATT CTGATTAGGA ATGCACAATC   11280
ACAAGAAAAT TTGTGATATA TATAGTCATT TTATTCTGTA TTGTTTTATT TTGATTTTGG   11340
TAAGACAAGA AACAATGTAG AAAGTTTGAC AACTTAAAAA AGTAATATGA GTGTGAGAAA   11400
GTCCTCTTCC AGGATTAGCA AAAAAATGGT TTTTTTTTTT TTTTTTTCCG AGATGGAGTC   11460
TCGCTCTCTC GCCCAGGCTG GAGTGCAGTG GCGCAATCTT GGCTCACTGC AACCTCCGCC   11520
TCCCGGGTTC AGGTGATTCT CTTGCCTCAG CCTCCCAAGT AGCTGGGACT ACAGGCATGT   11580
GCCACCATGC CCGGCTAATT TTTTTTATTT TTAGTAGAGA CGGGGTTTCA CCATGCTGGC   11640
CAGGCTGGTC TTGAACTCCT GACCTTGTGA TCTGCCCGCC TTAGCCTCCC AAAGTGCTGG   11700
GATTACAGGC GTGAGCCACC GTACCCAGCC TAAATGGCCA AGTTTTATTA TGGACAATTA   11760
AGCTGTAGAA TAAAAATCTA CTTTTAATAG CTGGCATAGT GCCTAGTGGT TTTGAAGCCA   11820
CAAGCAGGTT TACAAAAAAC ATTTAAATCC ATCTGAATCT ACAGAAAACT AAGATTACCT   11880
AAGCAGAAAA TGAAAATAGT TCAGGATTAA GGAAGATTAA CAAATGAAGA GTATATGTAT   11940
TTTAGAAGTA TTACTTTATA TTTTTATAGT ATAATAATAA TATTTACGTT CCTACACTTA   12000
TAATGAGTTT CGTATATATA TTAAAATAAT TTAATGGATT AGTATGTTTA TATTTGCTTT   12060
TAGTAAATTT GGTGTATGAT AAACTCAGTT GTCTACATTG TGAGACTACA CCTGAGGCAA   12120
TTTCTGTGTT GATATATACC TGAATAGCAG ATATTACTTG GGAGCAAATA AAATAGCTTC   12180
AGGCCTAATT TTGCAAGTTC ATGATGGGAG AGTAAGCATG ACTTCAAAGA ACTGACTTTG   12240
AGTTAAAACT TGAAGAATGA ATGTGACAAC AGCAAGTATA AAACAATGCC AGGCAGAGGT   12300
GGGACTGTTC ATGGGTATCA GGGTAAGTGT GTTGATAAAT GCTCAAAGTA GGAAATACCT   12360
TTCTTCCCCC ACACATGTCA GAAAATAACT GCAATAGAAT GCAACGACAT CTCAGAGATA   12420
AAGTGTTCAA CTTAGCTCTC AGAGACCGTT CAGTTACATT TTGTAATGAC ATTGGAATTG   12480
ATTGCATTTT GAAGGCAATT CTAAATGCAA AGTCTTCATT TTGTTGATAG AAGCTGGGTT   12540
ATTTATTATG AAATTTCAAA AATTAAGTAA AATATCTAAT TAGGATTATA CCAGCAAAGG   12600
CAAATTTAGA ATTCAAGACT TCATGATCCA TGGTAAGATT ATTTTAATGC AACTCTGCTA   12660
ATTAACTGAA ATTTCCTTTA ACTCTCACAT CTGCCTTTTA CTTCTTAAGA CATTTTTCTA   12720
GTATTTCACC AGAGCAAGAT ATCAGAAGGG TAAATCTCTT ACCAATGAAC TTTGCTAATT   12780
CTTAGTGACT CCGTTGACCC TGGTGTAAGG ATCAGGAACA AAGTGAATGA AATACATTTT   12840
AATACATTTC TGCTTTCTCT AATTCCAAAG ACCACTCTAA AGAATAAGTT ATTTGTGGGT   12900
ATTATCTGAA ACTTGGGATT AAAAGAGACC GTGATTACCC TTCAGGGATT TTGGCAAAAC   12960
TTAAGCCATT TCATCTGAAG AGCAAAGCAA GCCTCCCACA CTCTTGGCTT ATTCTCACAA   13020
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FIG. 6.5

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TTATCTAGAT ATCTAGCAAC AAAACTCTTG AGTAGTTTGT TAACTACAGA TGCCAAGGGC   13080
TGACAGTTTC ACTTTCAGTT TTCAGAATAT CTTTTGTTTC AGTGGTGTAA GCACACCATC   13140
AGAATCTCTA CTATTTAAAA TAATTAAGTT ATAATTGTAA CTTCCATTAG ATGTAGTACT   13200
TAAAGGAATC TAGAAGACAC AACTCATTAA TTATAGGAAT TTGACTGCAA ATTCTTCTGG   13260
GGGGTCTGAA TTGCAAAGGA GGCATCTTTG TAAGTCAGAC TCAACTCATT ACTCTGTGAT   13320
GCAGGCTCCT CCAAATGGCA GCAGAAACGT ATTACTCTCT AGAAACACTA CAGTAGTGCT   13380
ACAATTTCAG GGTTCTGTAG AGATAAGGAC AAATTGACAG AAACACATTC TTAGAAGGAC   13440
AGTATCATTT AAAATAAAAA TACTGTCATA ATTGTACACC AGGATAGCTT CTCCATAATA   13500
AATTCTTTAT GATTTTCTGA TTTTTAGAAA TCAGAATTGA ACTTTTTAAT GTGAAAAAAA   13560
TGAGAGAATT GTTTCAAAAT AGGACCACAT TTCTGTGTAT AATTTTAAAA GTTTAAAAAT   13620
ATTTGATTAG TAGACTGATA AACTGAAACA TTTTTGATAA GCTTTTCATT ACATACAAAC   13680
CATATAATTT GTAAAAAATT GGAAATTATT CAAAACTTCA CATAACTAAA GTGACCAAAT   13740
AAATACTGGA GAGGAAAGAA AAGGAGTCAA ATGAATCTAG CATTTTCTTT TTTTTTTTTT   13800
TTTTGGAGAA AGGGTCTCAC TGTGCCACCC AGGTGGGAGT GCAATGGCAC GATCATGGCT    13860
CACTGCAGCC TCAACTTTAT GGGCTTAGGT GATCCTCCCA CCTCGGCCTC CCAAGTAGCA    13920
GGGACTACAG GCATGCGCCA ACACGTCCAG CTAATTTTTT TGGTATTTTT TGCAGAGACG    13980
AGGTTTCACC AGGTTGCCGT GGCTGATCTG GAACTCCTGG TCTCAAGTGA TCTACCCAAC    14040
TCAGCCTCCC AAAGTGCTGG GATTACAGGC GTGAGCCACC GCACCCGGCC TAATCTAGCA    14100
TTTTCTAAAA GGAAGGACCC AGCAGTGAAC GGCAATATCA ATAATCATGT TCAAGACTAT    14160
CAGACATGCA AGCTGGGGAT GAATGGGTGG AAGGGGAAAA TGATGAATAA ATGATGAACA    14220
CAAGTATAGA CCCAGTGGAT TTGAGATGCC CAAGATGCCA GTGAGATATT CAAAGTTTAA    14280
CTCAAAAGCC ACTTCCCATA TGAAATCCTG ACAAACACTC CTACGTCCAA CTGGAATTAA    14340
TTTCTCTTCT GGGCTCCCAC AGCACTCTGT ATTTTTCTAA TAGCATAACA CTATTTTGTT    14400
TGTAGATATT TCTCTGATAG CATTACTATC TTTCCTCTTT ATCACAACTG TTTGAAGTTC    14460
TTTTGCCTCT TGCATCCACT GTTGCCCAAT CCCACTGCTG GAAGGCTCAT CTTATTAAGT    14520
TCTGTATTCC TAGTGCTAAC ACACTGTCTA CCATAGATGA TGTTCAATAA ATGGTTGCTA    14580
AATGAATTCT CTTGTGATAA TAGCACTATG GCAACATAAT CGACGGTAAA AATTTCTTCT    14640
CAATGTTTAC TTTTAGCAGA ATGCATTCAT TTATCAACTT TCATTGAGAA TATGCTAATT    14700
TCCATGACCC TGCTAGGAAA TAGGAAAATA AAGATGAATG TAATAAGGTG CTCATTCTAC    14760
TGAAAGTCTT GACTAGTGGA GAATTATGGA TCCAACTTTT CATGAAATGC CTTCAGTGGT    14820
AAGAATTCTC ATATTTGGAA TAAAAAATGT TATGGGTTGT GCCAAGATAC CTACATACTT    14880
CATAATTTTG TAGAGGGCTG TCCTTACTGC AGAAATGTAT ACTACTATAG TCATATGTGG    14940
AAATTCTTTT TATGATGCTA ACTGCATGCT AACCAGACTT TTTAATTTAA TACTTGCATT    15000
AAATAAACCA TGCTAGGAAT CCAGGAATCT AGCTTGGTTT ATTTTCCATA CAATGTACTC    15060
TTTGTAATAT GCATATACTA CATAAAAATT CTATTAATGG CCTCGTACTA AAGATGTGTC    15120
TGTTGGGGAA TCAGTTATTC TGTATAATTT TATCTTAATT GATATATTAA AATCTACCAA    15180
AAATATAAAC TCCGAGTAAA AGTATCTGCA TGGTGTGCAT ATGTTATTA TTTTAAGTGT     15240
CAGCGTATAC ATTTTCATGC CATAAAGTTA TAAAATGAAA AAATAGTAGC CTTTTATATT    15300
AAGTTCATGC TTATGTAGTT AGTAAAAACA AGAAAGCAAT TAACATACAA ACCATGATGG    15360
TGGTTAAACT TGCTTCAGTT TGTGTTTTTT AAAATTTGAA AGTGAGAAAT ACAGCTCGAA    15420
GTCAGCTCAT ATTTTCAGTA AGTACTGATG AGGATGTACT GGCCCTATTG ACTACGCTGA    15480
CCCCATTAAA ATATTTGTGA GTCTAAAGGT TCATATGACG CTGTTCCTTC ACTCTAGCAA    15540
CAGGCCATAC ATGTCTTACA TAGGGACTCT GTTCAATTCA TTAATACCTC CTGAAGTGCT    15600
CAACATCGTG GTTCATTTAT AGTAGATACT CAATACATAC TCCATTAACT GAATTCTAAG    15660
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FIG. 6.6

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ATAAACTGTC TGTTACTGAC AGAAATTTTC ACTTAAGGGA GTCTCCGTGG CTGAAGGCAA   15720
TTTTGAAATC CTGTAAAAGA ACCCACTCCT CTCCCCAAGT AATGAAGTTT GTCAGTTTCA   15780
AGCCTGTAAT AAGGTACTGA CTTAAAATTA ATTTTCTAAT AATACAGTAC TGCTATGTAT   15840
CTAATGTGGG GTTAGTCAAT GATAGGAAAA AAACATAAGA CAGAGTCACA TTTAAAAATG   15900
TGTGCTTAGG TGCATGGTGA CACCTGCCTG TAGTCCAGCT ATTCCAGGGG CTGAGGCAGG   15960
AAGATCCCTT GAGCTCACGA GTTTGAGGCT GCAGTAAGCC ACTGCACTCA GCCTGGGCAA   16020
CAGAGTGAGA CCCTGTCTCT AAAAAAAATT CGTTTTAAGT GTGCTCAGGA CATAACAGGA   16080
GCCGCTGGTA ACATGCCATT TCCACTGTGA ATATGGTAAG GACAGAATCC CTGTCTCTAG   16140
GCCCTCTTCC ACTAGTCAAT CTCATCATCA CCATCAAGGC CAACATTGGT ATTCTCTCCT   16200
CTGAGACAAA GTCTTTGACA TTTTCTATAC TATACTATGT CTTCCTCTCC CCAAATGCAT   16260
ATACAAATAA AATTTGAATG CTTCTTTCTC CATTTAGTGT AATTTTTTTT ATAACATAGA   16320
CCCAATTTTC AAACCCCACA ATGGTGGATT TTATTTGATG TATTGTAAAA AGCGCTGGAT   16380
TGAAGTCAAA TGGCTTGGGA GACCTAAATT CTACTCCTGC CTGTACCATG AAAGAGACAA   16440
ATCCCAAGGC TTTGCAGGGC TTCAGCTTCC TTGTTTGTAG AATAAAGAAT TATAAAATCA   16500
TCTCTTTTGG TCCTACTGGG CAATAAAAAG CTATGATTCT AAGCCTGTTC CCTTTTCTCA   16560
CCTAAGAATA CAAATTTGAT ACAAAGAGGC CGCAGAATGT GTCAAACACT CCCTGTTGCC   16620
TGGAATTCTC TCTTCCTTTG GGTTCAGGGA TAAAGGTATG TTATTTCTTA AGTCTCCCTT   16680
TGCTTTCTTC TGCTTGCCTC GTAAATATTT TTCCATCTTG GCAGTCCTAC ATGTCTTCTC   16740
ACTCTACATG TTTTCCCTAG GTGATGTGAC CCAGCCTGTG GCTTCCACTG CCATCCACAC   16800
ACGTCGCTGC CTCTCTCCAC ATCAGCATCG CAACTATCTC CTGGAAGCTT TCCAAGTGCT   16860
GAACTACAGT AACCTCAACC GAACTGCTGT TCATTCACCC CACAGGCTTG CCCCTCCTCT   16920
GCATCTTTGT GAGAACCTGA GAGTCATCCT AAACTCCTCC TTCCACCTCA CTCCCCACAT   16980
CAAATCGATT ACCAACTTGT GCTGATTTTA TCTTCAAATA CTCTCCAGAA TTGTCGCTGT   17040
CATGGACTGA ATATTTGTGT TCCCCCAAAT TCATATGTCC TAATCCCTGA TGTGACTGTA   17100
TTTAGAGACG TGACCTCTAA GGAGTAATTA AGGTTCAGTG AGGTCAAAGG TGGAGCCCTG   17160
ATCTGATAGG ATCAGTGTCC TTATAAGAAG AGACTAGAGC TGGGCACAGG GGCTCACACC   17220
TGTAATCCCA GTATTTTGGG AGGCTGAGGT GGGAAGATCA CTCAAGGAGA GGAGTCTGAG   17280
ACCAGCCTGG GCAACAGAGT GAGACTCCAT CTCTACAAGA AAATAAAATA GTCAGACACA   17340
GTGGTACACA CCTGTGGTCC CAGCTCCTCA GGAGGCTGAG GCAGGAGGAT GGCTTGAGCC   17400
CAGGAATTTG AGGCTGCAGC AAGCTATGAT CACACCTCTG CACTCCAGCC TGGGTGACAG   17460
CATGAGACCC AGTCTCTTTA AAAAAAAAAA AAAAAAGGC CATATATAGC CCAGAAGAGC    17520
GTCCTCACCA AAACCCAATC CTGATAGCAC CTGGAGGACT TCCAGCCTCC AGAGCTGTGA   17580
GAAAATTTCT GTTGCTTGCA CCGCCCAGTC TGTGGTATTT TGCTGTGGCA GCCCAAGCTG   17640
ACTCATCAGT GACCTTCTCT CTGTTACCGC AGAGTAGCTC ATCATCCTCT CTTCCCTAGA   17700
GTCCAGCCAC TCTCTCACAT CTACCTACCT AGCAGTATCA CTGTGGGTTA GAGTCAGATC   17760
ACTGCGGATT AAGTCCTCAT TCTGCCACTG CCTGTGTAAA TCTGAGCAAG TTACTTAATC   17820
TCTCTGTGTG TCAGTAACCT CCCTGTGAAA TGAGGCTAAT AATAGCAGGG TTGTTTCAAC   17880
AAGGCGATAC ATGCATAATG CTTACAACAC AGCTTGGCAC ATTATAAGCA TTCAACGAAA   17940
AGTGAGCTAC TATTATCTCA TCCGTTATCA GAATAAACCA CCTAAGCCAC AAGGCTGCCC   18000
ACATCATCCT CATGTTTTAA AACACTTCAG TGGGCTCCCC ACCATCAACA GGATAAAGTC   18060
CAAGCTTCCT TAGCATTTCT TAGAGGCTCC ATATGAATCC CCAAGTTCCA CTACAGGAAC   18120
ACAGGTGAAC TTTCCACTCC AACCTCAGGC TCCTTCGTGT CACTCCTCAT CCACATGGAG   18180
GTAAGCAGCA AGAGACTCCG TGCAGTTCCT GGTGGTTCCC TGACCCTCAG GCAGACTCTC   18240
CCCAGCCCTC TGCCTGCAAC GTCCTTGCCC TTTGCTTCCC TTGGCCAGCT CCCATTCATT   18300
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FIG. 6.7

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CTCCTTGATT CTGCTTGGAA GTTTCCCTCT CAGGAAGGCT TTATGAACCT TAGTGTAGGT    18360
TATGAACCCA TCTTTGCTCC TTTCATACCT TTTGCAAGCC TTTATTTATT ATGACACTTA    18420
ACCATTATCA TACTGAAGTG ACCTGTTGGT GTGTCTTTGT TCCCCACTAG ACAGAAAACT    18480
CAAGATCAGA GACCAGTTCT TGTTCTTTTT TTTTTTTTTT TTTTTTTTTT TTGTATCACA    18540
GTGTTTAGCA GCCTGCTATA TGGTAAATGT CAGTAAATGT TCCACAAACT GAATGGAATT    18600
GAGCTCTGGA ATCTAGACCA TCTTTTCCAT ACCCATCACT CCTGTCTTAG TTGAAGTCCT    18660
TATTTCCCAT TTGAAGCAAT GCAAAGGATT TCCTAACTCT AATCTCTCTT TTCTTCACAC    18720
CATCCTTTAA ACAGCCGACA GAATGGTCAT CCTAAAGCAC ATATATCCTA TCTTACATAT    18780
CCTAGATTCG GAACCTCTCT GGGCTTCTCA CCATATAAGA AGAAAGTCTA ACCTCCTTAG    18840
CAAGGTGCAT AGGTCTTCAA TGGGCTCCAC CTCACTTCTC TATATATACC TATACTCTTG    18900
CTACACTAAA CTTCTTTCTT ACTGTTGCTG GAACAAGTTC AACGCTTTCA AACCTCCCTG    18960
ACTTTGCATA TGCAGTTCAT TCTGTCAGGA ATGCCCTTCT CTCTTATGCC TGGGATATTC    19020
TCATTCATTC CATATGACCT ATTTCATAAG TCACTCCTTA ATGAAGCCTT TCTTAGATAT    19080
CCACTGGGGC AATCAGCTGC TTGCTCCTGT TTCCACAGCA CATTGTTCAC ACAGATAGCA    19140
CAGGACTTAC CACAAGTTAT TATAATTTTG TCTGTCTTGC CCATTTGAAT CCAAGGGCAA    19200
GGACGGAATC ATTCTCATCT TTGTATGTCC TGGGAACTAG AACTGTACCT GAGACATAAT    19260
AAACACTTGA TATGTTTGTA ATTTTTAAAT AAGTTAATGA ACGGAATGGC TAGAAAAGT    19320
GAGAAGAAAC TCTGGCTTAC TGTATATCAT ACTGTCATAC TAAAAATATA TACTGAAGAC    19380
AGAATCACAT TATATCATCA CTTTTCACGC TATAGGCCAT GATCCATTAT GAAAAAGAGG    19440
ATAGTAAAAA AATCACAGGG CACAATTTTT GTTTCTGTCA CACACATGTG TACCTGTATA    19500
TTGGACTGGA ATGTAAAACG CATGTTCCAT TGTAGAACGT GGTTTTAAAA GAGGCTTGGA    19560
AAACACTGCA TATGGTCATT TCTTAGTTTA GTACAATTTA TTATTTTCGT AATAACCTCA    19620
GCTATAATAT AAGTCTACCA TGAAGCATTT TGGGGAGATT AAATGAGATG TGAAAAGTAA    19680
ATGTGTTAGA TAGACTGAAT TCATATCATA GCTTGCTCTG ATACTTTACA AAACATTTAA    19740
CCTTACCCAC AAGTTTTAGT TTCCTCACTA AAGTCACCCT GAGGACAGTA ATGGGATCTT    19800
CCTCACAGAG TATTGTGAGG AATACATAAG AGAACGTACG TAAATGCCTG GCACTTAGTA    19860
TTTATTCAAT AAATCTTAGC AATGATGATG ATAACAACAT GGTACCTGGC ACATAAGAGA    19920
GTTAAAAATT AGTTTCTTCA GTCAAATGTG CTTACATTGA TAGTTGATAC TAACTGGGGT    19980
TAAAAGGTCA TTGCTGGCAT CTCAGAAAGA TAGATTACAG TGAAATAAAA AATGACTACT    20040
GCTTAAAATG AATGAAGACT TATTTACAAA GTCATGTTCA TCTGGTACAA TAATGAAGTC    20100
GCTCAATTGG GAGAAAATGA CAAATAATAC AAGTGAATAT ACAATCTTAC TTAAGACGAA    20160
AGAAATAGGA CACCAGGCTA ACTATCAGTC TCCTAAACCA CAACTTTATT TCTGATACAA    20220
AGAGACAGTG AGACAATCAG GGCTTCCCTC AAATAAATTA CTTAATCTCT CTTCAATTCA    20280
GTTTTGCATC TGTAAATATA AATAACTACA ATTTCACAGT ATTTCCATTT AAAAAGTTCT    20340
AGTGCAACAT CAGAAACAAG AACTTAGTAG GTGTTCAAAA AGAAATATAA GTTCTGCTTT    20400
GTTAGCCAGC AAATAGTTGC CTGTTTCTAG CCCTCACTTC TTTTCTCCTA AATCCCTATA    20460
TTGCATTTAT TTAACTTAAA GTGCTGGATG TGGCACTACG AGAAAGAAAA AGATATTTGG    20520
TAATCTTGTT AAAATCATTA GACATCCCAG GCTATCTGGA ATCACCTTGG GCTCACAGTT    20580
AGACATCAGC TATGGCTTGT TTTATTTAAA AATTCATCCA CTGATGCATG ATAATGGAAT    20640
TCACAGGAGA GCAATTTACC AAAAAAAAGA AATTTATTGA TTTATAATGT GAGATATTAA    20700
TTTAGCCACA AATATTTATT GAGCATCTCC TACATGCCAG GGAATGGACT ATATATGGCA    20760
GGAAAACAGA TACCAATCAT TTATATCAGG CATTTTTTTC TAATAGAAGG ATATTCGCAG    20820
GAGACAATGC ATAGCACCAT GCCTTGCACG TAACAGACAT TTAATAACTA TTAGTTGAAT    20880
AAAATTGGAG ACTAGAATGA TACATAAAGA GGCAAGAAAG AGCAAAGATA AGCCTTTCTG    20940
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FIG. 6.8

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AGAATTTCTA TCATGTTTTG CTCAATAGCT TGTCTTTATC CACTGCTTGT ATTTTTCCAT   21000
GTAGCTAATC CTCATTGGTC GTTAGAATTG AGACACCCTT TCCTTGAAAT CAGGAGCTAT   21060
AGGAGGCCAT TCTTCCTACT GGGCATTTTC TTTCTGGGAC AGGGTCTCAC TCTGTCACCT   21120
AGGCTGGAGT GCATCATAGC TCACTATAAC CTTGAAGTCC TGGGCTCAAG GAATCCTCTT   21180
GCCAAAGAGG TGGGATTACA GGCATGAGTC ACCATGCCAG CCTATTTGGC ATTTCTACTG   21240
TAGACAAAGC AGACTTACAG CAGTAGGTCT ACCTGCCTAA TACAAAAGA AAAAAAAGAA   21300
TTTTAACAAA CAAATGAGGG AATCAGATCC AGAAAGTGAT TCTTATAACT TAGATTACTT   21360
AGAGTAGATC TATAATCTGC TCTAGATCCA CTGCATACAG TGGGCCCTTC TTATCATATT   21420
CCATAAATAG CACTTTTCTC AGCCCAGCTT TTGATGATAG CTGAACAGAC TAACAGTTTG   21480
TCTAACAAAG GCTAGAGAAG GGGATAGCAA ATAATGGCCC ACAGGCTGAA TCCTGCCTGC   21540
TGCTCATTTT TGCAAAGTTT TATTAGAATA CGGTCATTTC CACTCATTTT CACACTGTCA   21600
ATGGCTGCTT TTGCGCTACA GCAGCAGAGC TGGGTGGTTG GGGCAGGGGT CACATGGCTA   21660
ACAAAGACTA AAATACTTAT CATCTGACCT TTTACAGAAA GTTTGCTGAT CCTTGGAGTG   21720
TACAAGTATT CTATATTGTT GATTAAGAAC AGAACCACAA GTATTAGAAG TTAGACCAGC   21780
AGGTGGTAAA GCTGATCATC TACTAATATA ATGGAAATTG GGGTTCCCAA TCAGGACTCT   21840
TGCTTTGATA GAAGGCCATC TTAACGAGGA GGGAGACACC TGCAGGCAAA GTCAGAATTT   21900
TCTGCAGGAA AAGTTTGAG TCCATTTCCC CTTGTGAACA AGTGCTCAGC TATGCATTTC   21960
ATCTTTAGTA ACCATGCTTC TATACCTGGT TCTCCTTGGC AAAGATTTCT TTCTTCAGTA   22020
AGTCTCAAGA CTTTCTGGGA AGGTAGGGAG ATATGGGGGT AAAAGTGTCC CAGGACTTAC   22080
TGAAGGAAGT GTTTTATGAT TATCTGATAG AATCACTGTA TCATGGTAGA GAAGGCAAAC   22140
AGAATATAAT CTGAAAATAG AGGTGAGGGT GAACAAATGG GCACTAAAAG TGAACTCAGC   22200
ATCAGGAAGG TAGCAAAACA AGACATCAGT CAAAGATATG GGGTGATTCA GACCTAAGGA   22260
AGATTTAATG TGGGATGTTT CCGTGTGCCA GGAGCTGGAC ACTTAAGCAA GAGGAGATCC   22320
AGGAATGTTG CTAAAACCAT GGCCTCCATA CTTTATTGGA ATTAGCACAA CTTATCCTTG   22380
TTTCTTTCAT TTTGCAATCA AAATCTTTAA AAACACATTA TTTAAAAATA CATTATTTTA   22440
AAAGCTAGAA TGAAAATTAT GATATCATTT AGGTGGTTTA AAAAACATCC ACCAGCCGGG   22500
CGTGGTGGCT CATGCCTGTA ATCCCAGCAC TTTGGGAGTC CGAGGCGGGC AGATCACGAG   22560
GTCAGGAGAT TGAGACCATC CTGGCTGACA CGGTGAAACC CCGTCTCCAC TAAAAATACA   22620
AAAAATTAAC CGGGCGTGGT GGCGGGTGCC TGTGGTCCCA GCTACTCGGG AGGCTGAGGC   22680
CGGAGAATGG CATGAACCCG GGAGGTGGAG GTTGCAGTGA GCTGAGATCG TGCCACTGCA   22740
CTCCAGCCTG GGTGACAGAG CAAGACTCCA TCTAAAAAAA AAAAACAAAA ACCATCCACC   22800
AAAATGGGAA GAAGTGATGA AAAATTACAG TCCAAGAAGA AGGGCCATAG CTGTTTAAAT   22860
CAATTGGTAT ATTTGTTATC TAATATAACC CCACGTAACG ACAGGTATTT AACAAATGTT   22920
TCTGCTGAAT TTGACGATTC CATTTCCCTT ACATCCCATA TGCAATCCAT CAGCACCCCA   22980
CATCCAACCC ATCAGTACAT CCTGTCAGCA TTGGCTCCCA AATATAACCT AAATCTAACA   23040
CATATCCTAC TATCTCTGCT GCTACAACTT TAGTCTGAAA TCTCATAATC TCCCACTTGT   23100
ACTACTGTAG ATGACTCTGA ATGAGTCTTC TTGCTTCCAT TCCACACAGC ATCCATACTG   23160
ATCTATTTTT TTTTTCAATT TTTTGTAGAG ACGGGGTCTT GCCATGTTGC CCAGGCTGGT   23220
CTTGAACTCC TGGCTTCAAG GGATCCTCCC ACCTCAACCT CCCAAAGTGA TAGGATTTCA   23280
AGTATGAGCC ACTGTGCCTA ACCCTGACTG ATCTTTCTAA GCATAAATCT AATAATGCCC   23340
CTTCCTTGAT TAAACCCTTC AATGAATTCA CATTAAGCAA ACAACCTGGC CAGGTGTGAT   23400
GGTTCATGCC TGTAATCTCA GCACTTTGGG AGACCAAGAT GGGAGGATCA CTTGAGGCCA   23460
GGAGCTCAAC ATCAGCTTAG ACAACATGGT GAAACTACAT CTCTACAAAA AATACAAGAA   23520
TTAGCTGGGC ATGGTGGTGC ACCTATAGTC CCAGCTACTC GGGCGGCTGA GCTGGGAGGA   23580
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<div align="center">FIG. 6.9</div>

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TCACTTGAGC CCTGGAGGTC AAGGCAGCAG TGAGCTGTGA TTATGCCACT ACACTTCAGC   23640
CTGGATGAAG TGAGACCTGG TCTCCAAAAA AAAAAAAAAA AAAAAAAGA AGCAGGGCAA   23700
GGTGGCTCAC ACCTGTAATC CCATCACTTT GGGAGGCCAA GGCAGGCCTC CTGGATCATG   23760
AGGTCAAGAG ATCGAGACCA TCCTGGCCAA CATGGTGAAA CCCCATCTCT ACTAAAAATA   23820
CAAAAATTAG CTGGGCATGG TGGCATGCAC CTGTAGTCTC AGGTACTTGG GAGGCTGAGG   23880
CAGGAGAATT GCTTGAACCC GGGAGGCGAA GGTTGCAGTG AGCCAAGATT GCCTGGTGAC   23940
AGAGCGAGCG AGACTCTGTC TCAAAAAAAA AAAAAAAAAG AAAGAAAGAA AGAAAGAAAG   24000
AAAGAAGAAA TCCTTAGTCC TGTCTTAACT ACTTGAGAGG CTGAGGGAGG AGGATCACTT   24060
GAACCTAGGA ATTTGAGGCT CCAGTGAGCT ATGACAGCAC CACGGTGCTC TGGTCTGGAG   24120
AGAGTGAGAC CTTGTCTCTA AAGAAGAGAA AAGAAAGAA TGAATGAATG AACAAAAGA   24180
AAGAAGGAAA GGAAAGAAG AGAGAGAGAG AGAGAGGAAG AAAGGAAGGA AGGAAACAAA   24240
ATAAAATAAA ATAATAAATA AATAAACCCA AATCCAACTT CTTTACCCTA ATCAACAAGG   24300
CTCAAATAAT CTCATGCCAA CTAAGTCTCT GAACAGCTCC TTCCATTCTA TTGCCAGATT   24360
ACTCCATCTT TCAGCCACAA GACCTTTTTA TCTTCCTTTT ACCAGCCAAA CACAATCCTA   24420
CCTCAGAACA TGTGCACTTT TTCTTTTCTC TGACTTGAAT CTCCTCCACC CATTATATAA   24480
TCTTAGCTCA AAGAGGCTTT TCTTGACAAC TTAGCGAAAG TATTTATCCC AGTCATTCTC   24540
TGCTACATTA TTCCAATTTA TTTTCTCCAT AGTACATTTC AGCACATAAA GATTTCCTTA   24600
GTATGTGCTT GTTGCCTTTC CCCAACCTCC TAAAATGTCA GCATTCCTTG AGGGCAGAGA   24660
CTGTTTCATT CCTGTATCAT CAGCACCTAA GACAGTTCCT GGAACATACC AAGTACTTAA   24720
TAAAAATTTG TTTATTGACT AGCTATGACA CATTTTACTT ATATAATTTC ATTTTCTCAG   24780
CAAAATGAAC ACTTTGAAAT GTAATTAATT ACTGATTTTT GCAGTATTTT CTAATTATTT   24840
AAATAAAATA TTTACTATTT TGGTCAACCA GAATTCTTAC ATTGTTTTAG CACCCAGATA   24900
GCTTCTAAAA ATGCTTACAA TTAACACAAT TTTATCTAGC AATATGTATT TATCACTAGA   24960
CAGAATGCAC TGAACTCTTC TTCATTAATA AAAAGCAATC CAGGCTGGGT GCAGTGGTTC   25020
ACGCCTGTAA TCCTAGCATA GTGGAAGGCC GAGGAGGGAG GATCACTTGA TACCAGGAAT   25080
TCGAGACCAG CCTGGCCAAC ATGGCAAAAC CCCATCTCTA TAAAAAACAC AAAAATTAGC   25140
TGGGTATAAT AGCAGACATC TATAGTCCCA GCTACTCAGG AGGCTGAGAG GTGGGAGGAC   25200
TGCTTGACCC CAGGAGATTG AGGTTGCAGT GAGCCGTGAT TGTGTCACTG CACTCCAGCC   25260
TGGGCTACAG AATGATACCT CATCTAAAAA AAAAAAAAAA TTAGCCAGGC ATGGTGGCAT   25320
GCACCTGTAG TCCCAGCTAC TCAGGAGGCT AAGGTGGGAG GGTCACCTGA GCCTGGAAGG   25380
TAGAGACTGC AGTGAGCCCT GGGTAGCCCG CGCCACTGCA CTCCAGCCCT GAGTGACAGA   25440
GACCCAGTTT CAAAAAAACA CAAAAAACAG AAAACAAAAC AAACAAACAA AAAAACCCAA   25500
TGCATTGCTG AAATGTTAAA TCCATTATAA AGAAAGTAC AGGGGTGGGC ATGGTGGTTC   25560
ATGCTTGTAA TCCCAGCACT TTGGGAGGCC AAGGTGGGCA GATCACTTAA GGTCAGGAAT   25620
TCAAGAACAG CCTGGCTAAC ACAGTGAAAA ATGCAAAATA CAAAATAAGC CGGGAGTGGT   25680
GGCGCATGCC TGTAATCCCA GCTACTCGGG AGGCTGAGGG GGAGAATCG CTTGAACCTG   25740
GGAGGTGGAG GTTGCAGTCA GCCAAGATCG AACTCCAGCC TGGGTAACAG AGACTCCATC   25800
TCAAAAAAAA AAAGTAAAAA GTATATAGTT GATTCTGCAG GGACTTAAAA AAGTATAAAT   25860
ATCTTTTTTA ACATCACAAA GCTCTGATAT CTGCAGGTTT ATGACTAACT ACTAGCTCAC   25920
TCCCATGAAT ACACGTATGT AAACAGGCTC TATACAATCT ACAATCCCAG ACTAAGGGGA   25980
AAAAACTGTC CTGTCACTGT GGTCTCCAAC CCTTGGCCCA TTTCTTTCCT CTTGACCACA   26040
AAACTTCTCA GGAGTTGCTT GTTTCCTCTT GATCCACTTA TCTTTAGCCC ACTCCAATCT   26100
GGCATCGGTT CTCAGTACTC TCCACTAAAA CTGCTTTTAT GAAGGCCATC AATGACGTTC   26160
ATGCTGCCAA ATCCAGCAGA CACCTCCTGT TTTCTAATTT TTTTTATTGT TATTTTTTAA   26220
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FIG. 6.10

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GAGACTGGGT CTTGCTCTGT CACCCAGGCT GGAATGCAGT GATGCCATCA TAGCTCACTG   26280
CAGCCTTAAC CTCCCTGAGT TCAAGAGATC CTTCTACCTC AGCTGGGACT ACAGGCATGC   26340
ACAGCTATGC CTGGCTAATT ACTCAATCTT TAACATAGCT GATAATTCCC TCCTTGAAAC   26400
ACTCTCAACT TTTAAGAAAC CCTGTTATTT TCCTCCTACA TTTTTAGCCA GTTCTTCTAT   26460
CAGCTTCTCC TTATCTGACC TCTAAATGTT AAGAACATTA ACAAAGACTG AACCTAGTTT   26520
TTTTCTCCCC TTACTGTACT GCTCCTGGGC GATGTCAATC AGTCCCATTG CTTTAGATAC   26580
TATCTGTTGA AACACTGAAA TCACTGGTTT TTTTTGTTTT TTTTTTTTTT TTTTTTTTTT   26640
TTGAGATGGA GTTTCGCTCT GTTGCCCAGG CTGGAGTGCA GTGGTGCAAT CTCGGCTCAC   26700
TGCAAGTTCC ACCTCCTGGG CTCAAGCAAT TTTCCTGCCT CAGTCTCCCG AGTACTGGGA   26760
TTACAGGTGT GTGCCACCAT ACCCAGCTAA TTTTTCTATT TTAGTAGAGA TGGGGTTTCA   26820
CCATGTGTCC AGGCTGGTCT TAAACTCCTG ACCTCAGGTG ATCTGCCCAC CTTGGCCTCC   26880
CAAAGGTTGG GAAAAGATAT CCCAATCTTT TTCCTATGAT TTCTTAATTG ATCTACTTGA   26940
CATATCCACT TGGACTTTTA ATAGGCATCT CAAACTTAAT GTGTTCAAAA TAAACCTCGT   27000
GACTTTCCCT CCCAAACCTG TCCCTACCTC CCTCAATAAC TAATATTATC ATTCTTATAT   27060
TCATATATTG AATAAATGTT TGTTCCCCCA AGTATTTGTT GCTATAAATT TATGAAGAAT   27120
TCTTTTCTCA CTAGTTATTA TAATTAAAAT GTAATATTTA TTTTCTTTAA AAACTTTACT   27180
TTGTAGGATT ATTATTTTTT AAACAGGGAC CAACAATAAA TAACTTCTCT ACTTGATTAA   27240
AACTAGGGCT TCCTCTTGTG CTCCCTCAGG ACTATTTCTT TGTAAAAACA ATAGGCTAAA   27300
TCAGTACTGG TGTCAAAGAA ATCATAATCT CACAACTTTA TAAATACAGC ATGTGGCAAG   27360
GGATTTTCCC ATCTTATATA GTAATAAAAT TTTCAGCTGT GCCATGGCTA AAAGTTTACC   27420
ATCAAAGTTG GAATTTTAAA TTAGAGGTAG TCATCTTTCT TTCTTTTTAA AGAAATGGAG   27480
TCTCACTATG TTGCCCAGGC TGGAGTGCAG TGGCTATTTG CAGGCATGAC CACAGCACGC   27540
TACAGCATCC TGGCCTCAAG CAATTCTCCT GCCTCAGCTT GCCAAGTAGC TGGGACTACA   27600
GGTCCCTGCC ACCACACCCA GCAGAAATAT TTAGCTTTCT GAATTTCTCA AGTGTGTGTA   27660
TGAATGAGAC TAGTGGGGTC CTTAACCAAG ATTCACAGGA TTTTTAGTGA TTTATTAAAT   27720
AACTTGGATT TGTATCTACC AGCATGTTCT TTGAGGTACA GGTATGTCTT TTATATCTCC   27780
TAATATAGTT CATTACAATG CTAAATACTA AGATGTGATG CTCACACACT ACAGAATAGC   27840
CAAGCAAATG AACTACTTAT TCTCATAGGG CTATTATAAT TAACAAATTC TTGTATCACC   27900
CCATCATTAT CAACAACAAC ATGATAGGAT TTCCTTTTAT CTTGAAGAGT CTGGAAAAAG   27960
GGTAACAGAG AGATATTTCT GAGGAACAAA CTGGTAATGA GGGAGCTACT GTGTCCATTA   28020
CAATACTCCT TCTAGAAGCT CAATACATAA TGACTAATCT CTGGAAAAAA GCAAGTGTGA   28080
GAATGGAAGG CTCTTCTTCA AACTATGCAA AATGAATCAA TCAGCAGTGA ACAAATTTAT   28140
GAGCCAAACA AATTCCTACA AAAATTACCA TCATATGCTG TCATGCATGT CTGCCAGTCT   28200
ATTTATCATA TTATTTAAGA AACAAACATT TATTGAAGAT TTATCATGTG CTCAGCACTG   28260
CCAAAGAGGA AATAAAGAGC ATAATATCTA TTCTTAGAAA ATAACATTAA CACAAATAGA   28320
AAACAAGAAA CCATAATGTT AAAAATATTA CATAGTAACA CAGAAAGACA ATGTATAATT   28380
ATACATACGC ACTAAAGCAA AGATAACATA ATTTATAAAT TATGAGGTAC AGAATAGTTA   28440
GATTCTGAAA ATTAAAATAA TCAGGAAAAA CTTCATGAAG ATGAGATCTG GCTGGATCC   28500
CAAAGGATAG GCAGGTGGAT CATGTAGAAC AGGGGAAAGG AGTTCCTGAT CGGGGATACA   28560
ATATATGTAA AAACTCGGAG ACAGGACTGA GCGTGAAATG TTAATGGGAC AGTAAAGAAA   28620
TCTTCCTCTG CAGCGGGGGA AAAAACAGAA TAATGGGAAA CTGCATGGTT AAAAGGTTTG   28680
ATGTTAAGAT AGTGCTTGGA CACAAAGAT CTTAAAGTTG AGTCAAAGA GTACAATGAA   28740
AGCATTAGAA ATAGAAGATA AAACACAATT AGGCCGGGTG CAGCGGCTCA TGCCTGTAAT   28800
CCCAGCACTT TGGGAGGCCA AGGTGGGTAG ATCACTTGAG GTCAAGAGTT TGAGACCAGC   28860
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FIG. 6.11

CTGGCCAACA TGGTGAAACC CCGTCTCTAC TAAAAATACA GAAATTAGCC GTGAATGATG   28920

GCTCGTGCCT GTAGTCCCAG CTATTTGGGA GGCTGAGGCA GGAGACTCGC TTGAATCTGG   28980

GAGGCGGAGG TTGCAGTGAG CCGACATCGC GCCACTGCAC TCCAGCCTGG GTGACAGAGC   29040

AAGCCTCTGT TTAAAAAAAA ACGGTAAAAA TAAATAACAT TTACTATTGT TTTCTGATGA   29100

TATATATGGC CTCTAATTGT AAAGCTGAAT GCCTAGTTTA CCACTTTTTT TTTTTTTTTG   29160

AGACGGAGTC TTGCTCTTGT TGCCCAGGCT GGAGGGCAAT GGCACGATCT TGGCTCACCA   29220

CAACCTCTGT CTCCCAGGTT TAAGCGATTC TCCAGCCTCA GCCTCCCGAG TAGCTGGGAT   29280

TACAGGCATG TGCCATCATG CTCAGCTAAT TTTGTATTTT TAGTAGAGAT GGGGTTTCTC   29340

CATGTTGGTC AGGCTGGTCT CAAACTCCCA ACCTCAGGTG ATCCACCCGC CTCAGCCTCC   29400

CAAAGGGCTG GGATTACAGG CGTGAACCAC CGCGCCCGGC CTATCATTCT TATTTTATGC   29460

ATTAGGAAAC TAAGGCTCAA CAAGATTAAA GCTGTCTAGG GTCACAAAGA TTGTAAGTGG   29520

AGGGGCTAGA ATTCAAAATG AGACCTGCTT GACTCCTAAG CCTGTACCAT TTCTACTATA   29580

TTTAGAGTGA AGTAGATGGG TTGAAGAAAT ATTTAGGAGG TGAAATTTCA AAAGTGTACA   29640

GTCAGAAGAG AAGACATATA TGGAAACCTA AATTTTCACA CAGTAAAGTG TCAATAATAA   29700

AGGCATAATG CCAAAATGAC AGAGGCTGTG CATGGTGGCT CATGCCTGTA ATCCCAGCAC   29760

TCTGGGAGGC TGAGGCAGGA AGATCACTTG AGCCCAGGAG TTTGACACCA ACCTGGCCAA   29820

CACAGCGAAA CCCCATCTCT ACTAAAAATA CAAAAAATTA GCTGGTAATG GTGGTACACA   29880

CCTGTAATCC CAGCTACTCA GGAGGCTGAG GCATTAGAGT CACTTGAACC TGGGAGGCAG   29940

AGGTTGCCAT GAGCCAAGAT TGTGCCACTG CACTCTAGCC TGGGCAACAG AGTGAGACTC   30000

TGTCTCAAAA AAAAAAAAAG GAAGACTCGA GGGCTAGAAC CCTGAAATTG GGAATGAACA   30060

GGACTGGCTG AAAATGTTTC TTGCACCTGA TAAAAATCTT GAAGAAGAAT GCTTTAAATA   30120

GATAAGAAAG GAGAGAGAGA GGTGGGCAGT GAGAGGAGAC CACCCTAAGT AATCAGAGAT   30180

TACTTACGTT GGTTACTCAG GCTGGTCTCT GAATCTGATT ATAAATGAAA TAGAGATTAC   30240

TTAAAACAAA GGGCTGTAAG GTAGCACTGT CCAGCAGCAC TTTCTATGAT GGAAATCTTC   30300

TATATCTGCA CTGTCCAATA AGGTGTAGCT GCTAGCACAT GTGGCCACTG AGTACTTAGA   30360

ATATAGCTAC GACAACCGAG AGGCTGAATT TTAAATTTAA TTTAATGAAT TCAAACAAAT   30420

TTATTTTTAA TACAGCACTT TAAATTTTAT TTTTAAATTT TAATCTATTA TTTATTTAGA   30480

GACTGGGTTA TGAGACTGGC TAATTTTTGT ATTTTTGGTA GAGACGGCGT TTCACCATGT   30540

TGCCCAAGTT AGTCTCAAAC TCCCGGGCTC AAGTGATCCA CCTGCCTTGG CCTCCCCGCA   30600

AAGTGCTGAG AATACAGGTG TGAGTCACCA CGCCCGGCCT AAACTTAAAT TTAAATAGCC   30660

ACGTGCGGGT AGTGGCTACC ATACTGCACA TGCAACTGTA AGATGTAGAA GTCAGATGTG   30720

AGCAAAGAAA TGACAAGCCG TTCAATGCTG TTAGAGAATG AAATTCAAGG TTCCAATGAT   30780

CTGAACTTGT GTCCCCTCAA ATTCGTATGT TGAAATCTTA ATCCTCAATG CAACAGTATT   30840

AAGAATTTGG GGCTTTAGGA GGTAATTTGG TTTTGAGGGT GGAGCCCTCA TGAATAGGAT   30900

GAGCACCTGA GGTAGCCTCT TTGACCCTTC CACCATGTGA GGACACACCA CGAAGGCACC   30960

ATGTTGGAAG CAGAGAGTGA GCACTCCCAA GACACTGAAT CTGCCACATC TTGATTTTGG   31020

GCTTCTCAGC CTACAGAACT GTGAGCAATA AATATCTGCT GTTTATAAAT TATCCAGTGT   31080

AAAGTATTTT GTTATAGCAG CCTGAATAGA CTAAGACAAA GGTGGACTAA GGCAGGATAA   31140

CAGGTTAGAA AAGGAGGCAG GGCCTTTTTT TTTTTTTTTT TTTTTTTGAG ACAAAGCCTC   31200

ACTCTCACCC AGGCTGGAGT GCAATGGCAT GATCTTGGCT CACTGCAACC TCCACCTCCA   31260

GGGTTCAAGC AATTCTCCTG TCTCAGCCTC CCAAGTAGCT GGGATTACAG GTGTGCACCA   31320

TCACACCCAG CTAATCTTTT GTATTTTTAG TAGAGACGGG GTTTCACTAT GTTGGCCAGG   31380

CTAGTCTTGA ACTCTTGACC TTAAATGATC CACCCGCCTC GGCCTCCCAA AGTGCTGGGA   31440

TTACAGGTGT GAACCATCGC GCCTGGCCGA GGCACAGTGT TTTTACAGAG AAGCCTGTTT   31500

FIG. 6.12

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AAGGTTTAAT CATATAAAAT GTATGATATC CAGTAAGTTT TGATATAAAA AAGAAACACC   31560
TGGCGATTTT ATATAATATA TTGTGCTAAG GAATTTTAAG CACTCTACAT TCTGCTCTCT   31620
AAGCTCTGTA AAGAGCACCA GGGATTTTTT TTTTTTTTTT CTTTTTGAAC AGGGTCTTGC   31680
TCTGTCAGCC AGGCTGGAGT GCAGTGGCAC AATCTTGGCT CACTGCAACC TCTGCCTCTC   31740
GGGCTCAGCG ATTCTCCCAC CTCAGCCTCC TGAGTGGTTG GGACCACAGG CGCATGCCAC   31800
TACATCTGGC TAATTTTTTG TAGAGATGGG GTTTTGCCAT GTTGCCCAGG CTGGTCTTTA   31860
ACTCCTGGGC TCAAGCGATC CTCCCACCTT GGCCTACCAC GCATGCCTGG CCACAACAGG   31920
GATTTTTAAA TGTAAGACTA CCTAGTCAAC TCTTATTCTA TATTAACAAT ATAGACAAGA   31980
AATAACCTCT AAGTAATCTC TATTTCATTT ATAATCAGAT TCAGAGGTTC TCTTATGCTT   32040
TACAATATTG TCCTACTGTG GGTAGCGCAA TAACTAAGGT AATCTGAAAG ACCAGTTATA   32100
TTATATACTA TAGTTAAATG CATTTCAACT GCATGGGAGA AAGCAACTGT GTTCTTTCCT   32160
CTCAATTTTA ACAGAAGGAA AATTGTCAAA ATTAGCTTAT TTAGAATGTC CTATCAGAGA   32220
ATTATTTTGA TTAAAATATA TTTTTAATCA ATAAAATATT TCTCTTTGGT CAATACTTGT   32280
CAATATAGAA TAATATCTAG CCACAAAATT AAAAAAAAAA CATTTTCCCC TATATTACAT   32340
TCATGGATCT TCTTGAATTT CTGTTATCTA GGTGCTTTTA AAAGTCATAT TTCTGATAAT   32400
ATGAAATCAC AGCTCCTTTT CTTTGGCATA TTTAGTTACT GTATTAAGAA AATGTACAAC   32460
ACATAATTTA GAATGGGTAA TTATTATATT CTCTTTATTC TTATATTGAA AATGACATGA   32520
AAATTACCAG TCTTCCCAGG TAATATAATT TAAGTTAAAG AACATCTACA TACTACAACC   32580
AATACCCATT CCCCTATGTT ATGTTTGGAA AAACATAGAA GTATCTTTAG TAGTACTCTT   32640
AGAAATTATC CCAGGTTCAG CATATTGGTA TTTTATTTCC AGGTTTAAGT TACAGTATTT   32700
TGGGCACCCC AAGTTTAATA AACTATTCCC TGCAGAAACC TGACAAGTGA AGTTGTGGCT   32760
GGGAATATGT TAGTCTTCAG ATAAAATGAA TTGTTTAAGA ATTTGCTAAA GATCTCAAAG   32820
CATCTTTCTT AAATCTAAAG AAAGTCAGGA ACAAAGCCAC AACCAGGACC ATAGCATCAG   32880
AAGATGGAAA GTTGCTTTGT CTTCAAACTT AAAAAACATT TTCCATTTTA AAATAATTTT   32940
ACTATTTACC TGTGATACTG TTGAAAATTA TGAAAAAACA GATAATTTAA AATTTAGTGC   33000
TTTTTTTTAA AAAAAAAAAA AAAGCGAATC CCTGGGACAC TTCATATAGT GCAAAACAAC   33060
AATTCAAGAA TTCAAGCATT GAAAGAAATA ATCTCTTATC CCCCAGTCTC TGAAAGGGAT   33120
TGCCTTTACT ACTGTTCCCA TCTTTATGTC CATATGTACC TAAGGCTTAT CTCCCACTTA   33180
CAAGTGAGAA ACTATTCAGT ATGGCTTAGT CATTTTTAAT GCAAGAGAAT AGGTAAAAAT   33240
GCCAAGCACC AGCCAGAGTT TTTTCTTTGC AGATAGATGT GACTCTTACA GGAGCAGCAG   33300
GGATTTCCCA CTTTGGGCGG AAAGCAGCAT TTAGGTATTC CCCCTCCAGT GCAGTTACAG   33360
ACCACCCCCC CGTAGAAGCT GCTCCTGTCC TCTGTGGCAT GTCAGCCTCT GATTATCTTT   33420
TAATAAACAA TATGGCATAT TAAGTCTCTT TTATGCCCTT CTTTGTATTC CCAGGTACCA   33480
CCTCCATGTC AGGATAACAA GAATTTGGTA ATGTTTGTTG AATAAATTTA GCAGAAGTTG   33540
AAAGAAAAAT CCTGTTTCTA CAGAAAGATA CCACTGGCTT TTGGGGAGCC CGAGTTCATG   33600
ATGAAACTAA AGAAAGCCAC AAAAGTTCAC CTCAATGCCA AGACATTCT TGATTTTTGA    33660
AAACCCAGTT GTCGAACCAC CCATCTATAG AAACTTGAAA GACTAAAAAC TATCTTACTC   33720
TAAACATTTT CTAGGAAGTT GATTCTACAA CACATTTTGG TTTTCCAATT TGGCTTCTAA   33780
TAATTATTTC AAAGTTTCTG TGGCCTAAAT TTTGTTTTAC ATTGATCCTT TGAATGGACT   33840
ACTGTTTCCA CATTTTAGAA CATTTAAAAA GATATCTACA ACCCGAGTCT AATCATAAAA   33900
AAAATCAGAC AGATCCAAAA TGTGGAACAT TCCACTAAAA AAGGAGTGGG GAGAGGTCTT   33960
TATTCTTCCA AAAATATCAA TGCCATAAAA GACAAAGACG GCTATGGAAA TGTTACAGAT   34020
TGAAGGAGAC TAAAGTTAAA TGCAAGAAAG GAAAAAATGG CATATAGGAC AGTATTGAAT   34080
TGACTGACAA AACTGGATTA CAATAGTAGA GTATCAATGT TAAACTTGCT GAAGTTGCTA   34140
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FIG. 6.13

ACTGTATTTC TTAGGAATTA TTCACCTAAG AATTTAGGCA CACAGATATG ATGTATGTAA   34200
GTTACCCTTA AATGGCTTAG AAAAAAATGT GTGTATATTC ATTTACATAC GTATCTACAC   34260
ACACGTGTAT TAGCGGAAGA GAGCAAGGCA CACATGTGCA TAAGTGATAA AGCAAATGAG   34320
ATGAAATCTT TATTTTTAAA TTTAATTTTG TAAGTTTCAG CTTTTTAAAA TTTTAGATTC   34380
CGGGGATACA CGTGCAGTTA TTACTTGGGT ATATTGTGTG AAGCTGAGGT TTGGACCTCT   34440
AATGTTCCTG TTGCCACAAC AGTGAACACA GTACCCAGCA CGCAGTTTTT CAGCCCTTGC   34500
CCCCTCCCTC CCGCTCTCCC TCCTTGCTTT TGGAGTTCCC AGTGTCTACT GTTCCCATCT   34560
TTATGTCCAT GTGTACCCAA GACTTATCTC CCACTTACAA GTGAGAGCAT GCAGTATTTA   34620
GTTTTCTTGT TCTGCGTTAG TTCCGTTAGG ATAATTGCCT CCAGTTACAT TCATGTCACT   34680
GCAAAGGATT TGATTTCATT CTTTTTAATG GCTGTGTAGT ATTCCATGTT GTATAGGTAA   34740
CACATTTTCT TTATCCACTC ATCAATTAAT GGGCACTTAC ATTGATTTCA TGTGTTTGCT   34800
ATTGTGAACG GTGCTGCAAT GAACATCTGA GCGCAGGTGT CTTTCTGGCA GAATGATTTA   34860
TTTTCCTGTG GGTATATACC CAGTAATGGG ATTGCTAGCT CAGATAAGTA TTTCTATTTT   34920
TAGTTGCTCT CCACAGGGGT AGAACTAATT TGCATTCCCA CCAACGGCGT GTAAGTGTTC   34980
CCTTTTCTCC ACGGCCTCGC CAACATACGT TCTTTTCTGA TTTTTAATAG TAGCCATTTT   35040
GAACTGGTAA GAGATGGTGT CTCATTGTAG TTTGGCTTTG CATCCAAATG AGACAAAATC   35100
TTAATGACAG GTGAATCTAG GTAAAAGGCA TACAGACGTT CTTTGTGTTG TTTTTTTAAC   35160
TTACATTTGA AGTTATTTTC AAATGAAAAA TAAAAGCAAG CAAAAAAAGG TCATTCTTCA   35220
TCTAGTAAAC TCTTCAAAGA TTACCACCCC CTTCAACAGT TTTTCCTGGT TCTAGTGAGT   35280
CTTCTCCCAT TTGTTTAGAT CTTTGTTGAA ATGTAGTCTC AGATAAAAAA TTGTATTTTT   35340
ATTTCTTTTA CATATTTCAA ACAATCTAAA TTCTTTTTAA ATGAAACTCA TTAAAAATAC   35400
TGCATTTGTT TCTAAATAAA ATGGTAGAGG TAATTTGCAC CTTTCCAAAC AGAAGCAATA   35460
GGAGCAACCC AGATGTTCTA GCCACGATCC AAGTCAACCA CATTCAATCT AAGAAGTAAT   35520
TGAAGGCTGT AACGACTTCT GTAAGGCCTA CAAAAATGAG TTCAGACACA AGCTCTGCTC   35580
AGTAAAAATC TAGTGGCAGA TGATATATAC AATGATCTGA GAAAAAGGCA GAATCAACAA   35640
AGGTTGTATT TTTATCTATT GCTGCGTAGC ATATTTCCTT AACTTTAGTA GCTTGAAACA   35700
ATAAACATTT ATTATTTCAT AAAGTTTCTG TGGTCAGAAA TCCAGGAGCA GCTTAACTGG   35760
GTGGATCTGG CTCAGCTGTA GACAAGATGT CGGCTGGGAC GGCCATCCTT TGAGGGCTCT   35820
GAGGGCTTTG AGGGCTGCAC GATCCAATTG CAAGGTGGCT CACTCACATA CTAGGCAAGT   35880
TACTGCTGGG TGCTGGGAGG AGACCTTAGT TTCTTATCAC ATGGACCTCT CCACAGGGCT   35940
GCTGGAATGT CCTCATGACC TTCCCCATAG TGAGTATTCC AAGACAGGAA AGTGGAAGCC   36000
ACAATGTCTT TCATGACCTA GCCTCAAAAG TGACATACTG TCATTTACAC AATATTCTAC   36060
TGGCTGTACA AGTTAATCCT ATTTAGTCTG GGAGGGGACT GCATAAGGGC ATGAGTAACA   36120
AGAGGCAAGA ATCCTTGGGG GCCATCTTGG AAGCTGGCTA CACAGAAGAG AAAACACCAG   36180
GGGAGTGCGA AGAAGGTGCA ATTAAACTCA ATTCCTTGGT ATGCCAATGG TAAGAAATAT   36240
TAGGTGATCT CTGGGGTGTA ACCTTTTTAA TTTAGTTCTT CACTGAATAA TCTGGCCAGT   36300
AATTGTAATA CAAAATACGG CACTCTGACA ATATTCTCTC CCTTTATAAT CAATTACACA   36360
CCAGAATATA TATAAAGAAA GACTTACAAA GTCACAAGTA ATTGTTTGGT ATTATTTTTA   36420
TAATCACATA CTAGGGCCCT ACAATTAGCA TTCACAAACA TCACTCCATG TTGGCCAGAT   36480
AAGTCTGTCT TTATAGTGGT TTACCATACG CGCCTTAGCA TGAAGTTACA TGTGGTTTCC   36540
TTAGCCATCA GATGCTCCAA ATGCAAAAAA TGTCTCACCA CAGTCACAGA ATCATGGAAT   36600
CCTAAAGTTA CCTGGGGGTTT CTGAAAATCT CATGGGAACA ACTCACGAGA ATTAAGGCTT   36660
AAGAAAGTGA TTTATCAAAG AACAAAACCA GCAAGACTTG AGTTTAGAAC TCGCAGCAGA   36720
GTTGTGACTA GAACCTGTTG AAATAGGCAA TGTAGAAACC CAGACTAAGG CACATTCTCT   36780

FIG. 6.14

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ACAACTTTAC TATGCAAGTA TGCTTAGATA CTCCTTAGCA AACAGCAGGC CTTGAGTAAA   36840
TTCTTTCAGA ACTGAATACA CAAAGGATAC AGAACGGAAT ACACTAACAA TAGTGCATGA   36900
TGTGCTCATT TCTGTAATAG AAATGAATTA ATTCTGATCC ATCTATAATT TATTATTGCT   36960
CCATGATTAA CGGAAGGCAT AGGAAAGATG ACTGGAATAG TGTAACTAGT ACAAACAAGT   37020
ATTACACTTG ACTGAACCTC ATTACACTGC AATTGCATAT TATATAGTAT GTAGGTGAAC   37080
AAATACTGGG TTAGTCAGTG GACCTACATT TGAATACTGG TTCTGCTCCT AGACAGCTGT   37140
ATGATTTGAA TGACTTCTTT ATACTTTCAT AGTTTCTCTG TTCTTCTCTG TAAAACAAAG   37200
GCTTAGAAGA TATTATGGGT TAGATTATGC CCCTTACAAA AGATGCTGAA GTCCTAAACT   ·37260
ACAATACCTG TGAATGTGAC TTTATTTGGA AATAGGGTCT TTGCAAGTGA TAAAGAAGAG   37320
GTCATGGAGT GACCTAATCC AATACGACCA GTGTCCTTAT AAAAAAAAGG AAATTTGGAT   37380
ACAGATACAC ACAAACAAGG AGAATATCAA ATGAACATGA AGGCAGAGAC CGGGGCGGTA   37440
CATCTACAAG CCAAGGGACA CCAAAGATTT TCAGCAAATC ACCAGAAGTT AGGAAGAGTC   37500
ATGGGACAGG TTCTCACAGT CCTCAGAAGA AACCCACCAT GTCAATACAT CATTTTGGAC   37560
TTCTAGTCTT CAGAACCGTA AGAAAATAAA TTTTTGTTGT TCAAGCTACC CAATTTGTGG   37620
TACTTTGTTA CAGCAGTCCT AGCAAACTAA TACAAATGAG CTCTTAACAC TGGTCTAAAA   37680
TAGGATAATC CTATGAAATG CTACAAATGT TTGGGAAGAT TTCTCATACT CAACTGTTTA   37740
CAGTATACCA CAAGCCTGTC AGTTGAAGAT ACAAACAGAC CCTCTATAAT CCTCTATACT   37800
TATATGCAAG GAACAGCACA CTTTTTCTGC AAAAGGTCAG ATAGTAAACA TTTTAGGCTT   37860
TGTGGGCCAA ACAAGGTTTC TGTTACATTT TTTTTTTATA ACTCCTTAAA AATGTAAAAA   37920
TCACCCTCAT CCCAACGGAC TACAGGAACA GACCTCAGGT CACATTTGAC TCATAGCCTG   37980
ACCCCTGGTG TGTAGGGTTA ACAAGCCTCC TTTCCCTGGG CTCCTTTTTC TTTCAGCATT   38040
CCAAGCCAAA GGAAACTATC TTTTTCAAAT CATTTTCTCT CCTAGGTGGG ACATCTTACA   38100
CCAGCCCAGG CATGCTTCCG ATAGCCTTAG AGTAGCTGTC CCTTCCTCAG AATTACTGTC   38160
TAATTGGCTA GAAGTTAGCA ACTTTTTACA TTTTTCCTTC AATTCCTTTC CATTAAGAAG   38220
AAGGCATGCA CCGGCAAATT ACTTGTGACT ATCAATGACA TACTCTCAGA AGCACCAGTA   38280
CCCCTGTGTT GTTTCTAAAC CCATTCTAAT AGACACATAC CCCAAGGTTA TGCTGTTTGT   38340
CATCTCACAA AATGACTTAC ATCTAGAGAT TTAAATAATT AATGTACTTT TCATAACTAC   38400
CAGGTACAGT AGATCTGATA ATGGCAGAGC TAAGCACATA TACAGAAAGT AGGGCAAGGG   38460
CCAGAGACTC ATTTTAAAGC AATGTTACAA GATCGTCACT GTTGCTTTTC ATTTTTCTAA   38520
ATGTGGCCAC TGCTGTTTTC TCACTAAAGG AAATGTTTTA TGTAAAGTGA ATAACAGTAC   38580
CTGGCATAAA ATAAGTGCTC AATAAATGTT AAGGCCTTCT CTCCCTCTTC AACTGGCCTC   38640
CTCATTTTTC ACAAAGTGAA ATAGAAAAAC AACATGGAAG ATAATCCTGT TGCTTAGGAA   38700
AAATAACTAA AGCTTGCTAG ACAAAATACA CCTGAAAATA TAGGAAGTGA GCTATAGCTG   38760
GCCTATATGC ATGTATGTTG GAACAGGACA AGATAGTGTA GGGTGGGGTG AAGAGGACAG   38820
AGAAATGGAA GGAAAGGGGC TACAGCCTTG GTGGCAAAAT AAAGGATAAG ACGACTCTTT   38880
TAAAATGGTC TATTTCAAAT GCTGGGTTGT GAAACTTAAT TTGATTACTT CATGAGAAAC   38940
AGCATCTATA ATCCATCCCT GATTTTTCTA CAACAAAAT TTATTATTTA TTTTATGTTT   39000
GTGTGTAGAT CTTTTATATA TATACATGTA CACACGTATA TGTATATATT ATATATGCAT   39060
ATGCATATAT ATGTGTATAT ACATATATAA TATATTGTGT GTGTATGTGT GTGTATATAT   39120
AATTTTTTTA AAGGAATGGG GTCTCACTAT GTTGCCCAGG CTGGACTTGA ACTCCTGGGC   39180
TCAAGCAATC CTCCACCTCA GCCTCCCAAG TAGCAACCAA CAGTTTTAGT TTTGAAAAAA   39240
TAACAAATAT TAAACACCCA TGTGTAAGGG TTGGTACTGG GCCCTGTGTT AGTTTGCATG   39300
GGCTGTCGTA ACGTAACACT ACAGGCCGGG CACAACGGCT CACGCCTGTA ATCCCAGTAC   39360
TTTATGAGGC CAAGGTGGGC GGATCACCTG AGGTCAGGAG TTTGAGACCA GTCTGACCAA   39420
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FIG. 6.15

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CATGGAGAAA CCCCGTCTCT ACTAAAAATA CAAAATTAGC CATGTGTGGT GGCTCATGCC   39480
TGTAATCCCA GCTACTTGGG AGACTGAGGC AGGAGAATCG CTTGAACCTG GGAGGCGGAG   39540
GTTGTGATGA GCTGAGATCA GGCCATTGTA CTCCAGCCTG GGCAACAAGA GCAAAACTCT   39600
GTCTCAAAAA CAAAAAAACA AAAACAAAAA AACCCTGATA ACACTACAGA CTGGGTAGCT   39660
GGACCAACAG AAATTTATTT TCTCACAGTT CTGGAGGCTG GAAATCTAAG ATAAAGTTGT   39720
TGGCTGGTTT GGTTTCTGAG GCCTCTCTCC TTAACTTGCA GATGGCTGCT TTCTTGAAAT   39780
GTCCTCACAT AGCTGTCCCT CTGTCTGTTT CTGGTGTCTC CCCACGTATC CAAATTTCCT   39840
CTTCTTATAA AGATACTAGT CATATTGGAT TAGGGTCCAC CATAAAGACC TCATTTAAAC   39900
TTAATCACCT TTTTACGGCC CTGTGTCCAA ATACAGTCAC ATTCCGAGTT CCAGGGGATT   39960
AGGGCTTCAA CCTATGAATT GGGGGTGGGG CACAATTCAG CCCGTAACAG GCCTAGACCT   40020
TAATTTGTCA ACACTACAGT TAGATTTATA GTATAGTAAC TGCATCTGTG CTCATCTAAA   40080
TGTCATACCC AAATGAAATA ATATAGCATG ATGATCTGAA TTTATTAAAG GCAATTTTTC   40140
CTATAGAAAC CCAAATCTAT AAATTATATA CAAACTGTGG TAAGTTACTC GATACCTTGC   40200
CAGGACTCAT CTATGGTGGT AGATAGACCA CAAAGAGTAC CACTGAAAGA TCCCTTTCCT   40260
AATCACAGTT TCCTCACTGG CTTGCCACAA AACCTAAAAT TCTTCTATTC TTTCATTGGC   40320
AATTTATTTC CCCTGAAAAT GTAAATAATC TCTGGCAGAG CAATCTATTA AGTGATCATC   40380
AGCCACTAAC ACCTTAGGGT AGAACAGCTC AGATCACAGT CTTAAAATAA ATTCCATCAG   40440
TATGAAATTT TCTTTATTAC TGCTCCGCTA CTGGAATGTT AGATCACTGT CTGCTTTAAT   40500
AATAATTCTG GTGTAGGTCA TTCAAATTTT GTTTAAGATA ATAAGACAAA TAGCAGGTAT   40560
AAAAACATTC CGTCATCTAA TAAAGCAACC CGAGAACAGT AAGAAGAACG TGATGAAATT   40620
AACATTTTTG AGTACCTGCT AGGAATCAAG TATTCTGCTA GATATTTTAG AAATCATCTC   40680
AATTCAATCC TAAAAATTAT TCTGTATAAT AGTATAGGTT GAGTATTCCT AATCCAAAAA   40740
TCTGAAGCTT TTTTTTTCCT GAGACGGAGT TTTGCTCTTG TTGACCAGGC TGGAGTGCAA   40800
TGGCGCAATC CTGACTCACT GCAACCTCCG CCTCCTGGGT TCAAGTGATT AGGGATACTC   40860
AACTGGCTAA ATATAATGCA AATATTTCAA AATCTGAAAA AACCCAAATC TGAAACACTT   40920
CTGGTCCCAA ACATTTCAGG CAAGGGACAC TCAAGTTGTA TTAATCCCAT TTTACAGAAG   40980
AAGAAACAGG CTCAGATAAA TGAACATCTC AGAGCTTGTT GATAGCAAAG GAGAGATTGA   41040
AACTGTCAGG CCTCTGATCC CAAGCCAAGC CATCACTTCC CCTGTGACTT GCATGTATAC   41100
ATCCAGATGG CCTGAAGTAA CTGAAGATCC ACAAAGAAG TAAAAATAAC CTTAACTAAT   41160
GACATTCTAC CACTGTGATT TGTTTCTGCC CCACCCTCAC TGATCAATGT ACTTTGTAAT   41220
CTCCGCCACC CTTAAGAAGG TTCTTTATAA TTTCCCCCAC CCTTAAGAAG GTTCTTTGTA   41280
ATTCTCCCCA CCCTTGAGAA TGTAATTTGT GAGATCCACC GCTGCCCGCA AAACATTGCT   41340
CTTAACTTCA CCACCTATCC CAAAACCTAT AAGAAGTAAT GATAATCCAC CACCCTTTGC   41400
TGACTCTCTT TTCTGACTCA GCCCGCCTGC ACCCAGGTGA AATAAATAGC CATGTTGCTC   41460
ACACAAAGCC TGTTGGTGT CTCTTCACAT GGACACGCAT GAAAGAAACC CTACCTGGTT   41520
CTGTGTCTTA CCTGTTGGGG GCCTGTGGTC AAACTACTAG TACGGAGTTT TAGTGTCCTC   41580
ACTTTAAAAA TGAGGGTTGT GGCCGGGCGC GGTGGCTCAC GCCTGTAATC CCAGCACTTT   41640
GGGAGGCCGA GGCGGGCGGA TCACGAGGTC AAGAGATCGA GACCATCCCG GCTAAAACGG   41700
TGAAACCCCG TCTCTACTAA AAATACAAAA AAATTAGCCG GGCGTAGTGG CGGGCGCCTG   41760
TAGTCCCAGC TACTTGGGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGCGGAGCT   41820
TGCAGTGAGC CGAGATCCCG CCACTGCACT CCAGCCTGGG CGACAGAGCG AGACTCCGTC   41880
TCAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAATGAGG GTTGTAAGGT   41940
AACTACCTAC TTTTTATAGC ATTGTAGTGA AGTTGAAATG AATTAATCCA CATATATTAT   42000
AGTGTGGTAG AATGCAGCAG AACTGATGAT GTATGACTTC TAAGACTAGT CCTTAAGAGA   42060
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FIG. 6.16

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CCTGCAGTTT TTGCTTTTGC CCTCTTGGAA CACTCCTGTT GCCATGTTAA GAAAAACTCT   42120
GGGGAGACTA TGAAGGAAGA GAGCATACTC GGGGCAGGGG GGTGAACAGG ACGTGCACAT   42180
GTACGAGCGT ACAAGCCAGG TGACACCAGT ACCACAGCCT CAGACATGTC ACCGGGGATA   42240
CCAGCACCAC AGCCTCAGAC ATGTCACCGG GGACACCAGC ACCACAGCCT CAGACATGTC   42300
ACCGGGGACA CCAGCACCAC GGCCTCAGAC ATGTCACCCA GGGACACCAG CACCAGCACC   42360
ACAGCCTCAG ACATGTCATC GGGGACACCA GCCCCATGGT CTCAGACATG TCCCTGAGGC   42420
CCACTTAGAC CCTTCAACCC CAGCCCAGCT GCTAACTGAC TACAGCCACA TGAACAGAAC   42480
CAGGTGAGAC CAGAGGAAAC TTCCAGTCAC CTACCAGATC ATGACAAATA ATAAACGATG   42540
TTTTTTAAAC CACAAAGATT TGGAGCAGCA TTTGTTACAC AAAATTAGAC AACTATTACA   42600
GTTCGACTAA AAACATGTTC ATTTACAATA CTAAATTAGA AGTGTAAGAA TGGGAGAAAA   42660
ACTTCATACT TTAAAAGTCA TTTTTTCCTC CAAAAACTTC CAACTTTGAA AAACTGATTT   42720
TTATAATGCA TAAAAATTAA AATAACCTTA GAATTTATAT GAGTAGCATA GCCAGCTGGC   42780
TTTATTATCT GTTGTACTCA ACACTTCAAT AATCACTGAT GTTTTAGAAC TCTTCAGATT   42840
TAGAACTCTT GCCCTTGCTT TAGTCTGGTT TAAGCTAAAT AATTGTTCTT CCTCAAGAAC   42900
AAATGACCTT ACCTCGTTTT GTTTTCCTTG TCTGAGAGAA ACACATTAGC AGTCTCCCAT   42960
CTTGTTTTTC CTTTTCCTGT CACCCAGGAC AGAGGGCAGT GGTGTGATCA CAGCTCTGCA   43020
GCACGACTTC CCCAGGTTCA GGTGATCCTC CCACCTCAGC CTCCCAAGGA GCTGGGACCA   43080
CAGGCACATG CCACCACGTC CAGCTTAATT TTGTATTTTT TTGGTAGAGA TCAGGTTTTG   43140
CCTTATTGCC CCAAGCTGAT CTTGAATTCC TGGGCTGAAG CAATCTGCCT GCCCTGGCCT   43200
CTCCAAGTGT TAGGATTACA GGTATAAGCC ACCGTGCAGC CTTATATTTT GTTTTAAATT   43260
TTCCTCTGTA TTTTTCTCTC TGGCAAATTG TTTAGGGAGT TTCTTTAGTT TATCAGACTA   43320
AATTTCAAGG CTTTCCTTCC AATTTTGACA TGTAAACAGT CCCTCATTTC TGCTTATCTA   43380
GTGATTATTC CCAAATCTGT GTTTACAGTC TAGCTGTCTC TCCTGAGATT AAGACTTGTT   43440
TCTCTAACTA CCTGACGGCA GAATCTCCTC TTGGAAGTAT CAAGGAGGCA GTTCAAAACT   43500
GAACTGGGCA TTGGCTCCAC TCCTTCTCCT TCTCTTTACT ATTAATACCC TTTCTCTCCT   43560
TCTATATGAC CACACTAAGT CTTATTTAGG CATCGTTTCT TCTGGGAGAC CTTTGTAGAA   43620
TCTCTGAGGT TATGTTAACA TGCTAAGGTT TTCTTGACAT TCTCAGATTG GGTTAGGTGA   43680
ACTTTTAGCA ACTTATCTTT TTACTAAAAA GTCATCCCTC AGTATCTGTG GGGAATTGGT   43740
TCTAGGACTC CCTAAGGATA TCAAAATCTG CATGAGCAGC CCAGGTGAGA CCAGCAGAAG   43800
CACTTTACAG TCACCTACAG GATCATGACA AATAATAAAT CATGTTTAAG CCACAAAGTC   43860
CTTTACATAA AATGGTATAG TATTTGCATA TAACCTACAC ATCTTCCTGT ATCCTTTAAA   43920
TCATCTCTAG TTTATAATAC CTCATACGAT GAAAATACTA CGTAAATAGT TGTTATACTG   43980
TATTGTTTAG GGAATAATGA CAAGGAAAAA AGTCCACGCG TGTTCAGAAT AGATGCTTTT   44040
TTTTCTCGTC TAATATTATG GATCCACAGT TGGTTGAATC CACAGATGTG GAATCCATGG   44100
ATACCAAGGA ACGACTGTAT GCATTTTGAC AATTATACTT CTCATCTTAC CATGCATTCA   44160
ACAAACAGAA CATGTAAAGC GGTGATAATG CTGTGATGAA AAATAAAGCA GGGGAAGAGG   44220
CTGCATCCAT CTAGTGGAAA CGATGCCCTT TTCAATCTGC ACAAAGAGAA AAAGCTGCTC   44280
TCCAAGTTGG GGGGTGGGTG GGTCAGGTAT GTAAATTGGT CAGGAAGGGA TCTGTAGGCA   44340
CTTACAGATT TGACGCTAAT GAGATGGGAA GCCACAGGAA GGTTGTGAAG AAAAGACAAG   44400
ACATGATCTG ATTCATGTTT TGATCTGATA CACTGGTTGC TAGATGGAGA ATAAGCTGCA   44460
TGGCGGTGAG AGGAAGCAGA AACAATAGGA GGGTAATGCT ATAATCCAGT GGTCCATAAT   44520
CCAATATCCC CCCAAGGAAC AGTTCGGCAA TGTCTGGTGA CATTTCTGGC TGTCACAACT   44580
GTTGGGGCGG AGTGCTACTT GCATCTAGCA GGTAGAAGCT AGGGATGCTA CTAAACATCC   44640
TACAATGCAC AAGACAGCCC TTCCCCCAAC ATTGCTGGCC CAAAACGTTG ATAGTACCAA   44700
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FIG. 6.17

GGCTGAGAAA CTCTGTTATA ATCTGTCCTA GAATGTAGCT TGGATTGAGA TGGCAGTGGT   44760

AAGAGCTGGA GAAGTGCTTA GCTTCCCAAT GTTTTTTTGT TTGTTTGTTT TTGAGACGGA   44820

GTCTCGCTCT GTCGCCCGGG CTGGAGTGCA GTGGCGTGAT CTCGGCTCAC TGCAAGCTCT   44880

GCCTCCTGGG TTCACGCCAT TCTCCCACCT CAGCCTCCCG AGTAGCTGGG ACTACGGGCG   44940

CGTGCCACCA CACCCAGCTA ATTTTTTTGT ATTTTTAGTA CAGACAGGGT TTCACCATGT   45000

TAGCCAGGAT GGTCTCCATC TCCTGATCCC GTGATCCACC CACCTCGGCC TCCCAAAGTG   45060

CTGGGATTGC AGGCGTGAGC CACCGCGCCC GGCCTGAATG TTTTTAAAGT ACTGGTGACC   45120

ATATTCGCTG AGGGATTAAA TGTAAGGTAT GAGGGGAAAA TAGGAATCAG ACACCAGGGT   45180

TTACTGCCTG AGCAATGAGA AGAACGACGT TCCTCATACG GAGATGAGGA AGAATGTGGA   45240

ATAGCAGGTA AATAGCATGT GCTTGCTTTG TTTGGGGCTG TGCAGAAGAG ACTGATGGGA   45300

CCAACGTGCT CAGTTCTGGA TATATTAAAC TTGGAATGCC TATTTGGCAC CAAGTGAATG   45360

TATCAGGTAG GCAGATGGAT AAATGAGTCT GAAGTTCAGG GGAGAGGCTG GGGTGGCAAT   45420

ATGAACTTGG GAGTCTCCAC ATCTGAATAG TATTTAAAGC TATACAACAG GATAAGGTGA   45480

TTTAGGAACT AAACACAAAT TGAGACGAGA TCCGAGCCCA GAGGCACTCC GATGTTTAAA   45540

AAAGAGGAGG AACCATCAAA AGATACTAAG GAGAAGCCAA GAAGTAGGAG AACTGAGAGT   45600

CTGAGAGAAT CATTATACTC ATTTGATCGA CTGCAACAAA TGCTGCTTAG AGGTCAAGCA   45660

AAATGAGGAC TAAGCAAGGA CCACCAGGTC TGGCAACATG GAGGCCAATG CCGACGTGGA   45720

AATGAGAGTT TTGGTGGGAA GACAGGAATA AAAGTCTCAC AGGTCTGAAT TCAAGAGAGA   45780

GAACAGCAGA AGAAGGGTAG AGGTGGTAGC CATAAACAAT GATACATTCT CTTGAGGCCT   45840

TTTCTTGCAA AGCTCAGTGA AGAAACATGG TTCCAGAGAG GGATTTTTTT TTCTCTCATT   45900

TTACATATGC AAACATATAA AAAAGCTGAA AGAATTGTTT GACAACCACC CTTATTCTTA   45960

CCACAGATTC AACATTTAAT GCCATATGTT TTCCCTGTAT GTACTGTGTA TTGTTTGAGG   46020

ATAACTTCCC CTCTAAATAT ACCTCGGATG TATCTCCTAA AATAAGTCCA TTCTCCTACA   46080

TAGCCATAGT AACCATGAAC ACACCTAGGA AAATTAAAAA TATATTCTCA AATATATTAT   46140

ATAGCTGGGT ATATTACAAT TTCCCCAATA TGTGATTTGC AAACCAGGAT CAAGTCAAAG   46200

TCCATGCACA GCATTTGGTT GTCATGTGTC TTTGGTCTCT ATTAATAATG ATGACTGTTT   46260

GAAAAGACCT GTCCTATAGA ATAAATTTGA CTGATTATGT CATGCCATTG AACTTGTTTT   46320

TCTATTCTAG AAGGATAGTT TTTTAGGGTA GTGAATACAT TTATTACTCT TGGCACAATA   46380

GTCTAACATT TCCCAATTTC CTTATATCTC TGCCCTTTCA TTTTCAGAAA ATCAATTATT   46440

CCAAGATTTG TTTTTCATTT ATCATCACTT ATTAGCTCTG AAGACTCAAC TGAGCAACTT   46500

TCAGGGTTTA TATACCCTAT ATTCAGAAAA AAACTACTAC CATCTCTCAT TTACCCTAAG   46560

AATTCATAGG AGAGCATGTC TTAAAGCTGA TCAATAACCA AACCAAACAT TTTATTGATC   46620

ATATTACATT TGGAAAGCAA AATGAATTTC CTAAAATTTC TTCCCTGATT AGCAAAATAG   46680

TGCCTCCGAA CACTTGAGGG TGAAAGTTGT TGTCAAATAT GCCTACATGA CTGGAAATTA   46740

TGACATCCAA ATGAGTTCAC TGGGTCTGAT AATAATATGC TCTACATGCT TATGTCTATG   46800

TAATAAACAG CTTACATCTG GATGAGAAAA TTGATTATAC AAATATTTGG GCTTCTACAA   46860

CTGGTCACTC ATCTGTAAGT ACTTAAAGCA ACTTAAAATG CAAACTGACC TAACAATGCT   46920

TATGGTTAGA ATTCCAAAGA ATGTTTAGGC ATTGTCAGGT TATGTTAAAA CATCTTCTGC   46980

CACAATCTTC AAGTGATTTA TCTTTTCTGT TGTGTTGAAT AGCTATAGAA GACAAATGAA   47040

TTCTGCACTC CTGAATTCAA TGAACATTTC AAGTTCCTC ACTTACACTG TAAGATTACG   47100

TAGCATATTT TAAGAAATAA ATTATAATCA TTTTATTTCA CTTATTGAAC TTCTTTTAAG   47160

CTTTGGCATT AGAATTTTAA TCAAAGCACT GCCACTTGCT TACAGTGATG GTTTTTAGGC   47220

TCTTTGGGCC TATGGACTAT TTCAATGACC TTCACTAGCC ATCTAGTCCA CCTTATCCTA   47280

ATTATTACCA CTGCAAAAGA AACCCTCACT TGAATAAATC AGTAGATGGG CATGAGGCAC   47340

FIG. 6.18

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CTCCCAGGAG ACTATAATTA TTAACTCATA CTAAAATCAA AATTGTAGCT ATTATCACTC   47400
ATATGGTTTG GCTCTGTGTC TCCACCCAAA TCTCATCTTG AATTGTAATC CCCACGTGTC   47460
AAAGGAGAAG CCTGGTGCGA AAGGACTGGA TCATGGGGGC GGCCTTCCCC CTTGCTGTTC   47520
TTGTGAAAGA GTTCTCCGAT GGTTTAAACG CATGGGACTT CCTCCTACTT GCTCGCTCTC   47580
TTCTGCCACC ATGTAAGATG TGCCTTGCTT CCCCTTTGCC TTCTGCCATG ATTTTAAGTT   47640
TCCTGAGGCC TCCCCAGCCA TGCAGAAATG TGAGTCAATT AAACCTCTTT TCTTTGTAAA   47700
TTACCCAGTC TCAGGTAGTT CTTTACAGCA GTGTGAAAAT AGACTAATAC AATCACCTTA   47760
TGGTAAGTCT GTCTATAAAT CACCTGAACT TTCACAGACT ATCTAGAAGA ACATGTAACC   47820
AGAGTAGTTC TTGATCATGC TATATAAATT ACTGATACAG AAATAGAGCT AGACAGGAAG   47880
GGGCTGGTAG TAGAGAATCA TCCTCTGGAC ATATTCTCAC AGCCTAATCT CTAGCTAGCA   47940
AATTTTATAA TATATATAAA AATACAATTA TTTCACAAAA TTACCATGAA ACGATTTTAT   48000
TGGGATATTA GACATTACTG AATTACTTGT TCTGTGAGGT ATACAGTGAA ATTAACATGT   48060
TATAAAATTG TGGTAGCCGG CCCCCAAGAT GGCCTCCAAT GAATCCTTCA CCTCTTGGTA   48120
TTCATACCTT TGTGTAGGTA GGTCTGTGTA ACCCATAGAA TACAGCACAG TGACAGTAGG   48180
TCACTTCCGA GGTTAGGTTG TGAAAGACAC TGTGGTTTCT GCCTCTCTCT CAGATCACGT   48240
GCTCTGGGGG AAAAGCCAGG TGTCATTTTG TGAAGACACT CAAGCAGCCT TTAGATGACT   48300
GCAACCACAT AAGAGGCTCC GAACTGGAGC CACTCAGCTA AACCACTCCC AGATTCCTGA   48360
CCATGTATCA TTTCATACAC AATGTATGAA ATGACAAATG TCTGTTGTTT TAAGCTGTTT   48420
GGGGAATAAT TTGTTACATA ACAAAATATA ACTAATACAA TAATACATAC TGATTTAACT   48480
GAAGTTGTAA CTTCATAACT TATTTAGGTA CTAAAAATCA CAGCAACCCG ATGCAAAGTA   48540
CTAAAAAAAA AATCCATTAA TACCTATTGA GTACTGTTGA GGGCATGAGG AAAGCTCTTT   48600
CATACTCCAC ATAAAACTTC CTTACCGTAA TATTCATGGC TGACCTCTAC TCTTAACTCC   48660
TTTCTAGGAT AGGAGGGGCT AACTGATCTG ACAGCAAGTT TGGGAGAAAA AATTCTGAGG   48720
CTCGGCCAAC TTCCTCTCTT CTTTCCATTT GGGATTTGGC TGACTGAAGA GGGTCATTTG   48780
TTTTGGCCTG CTCTCTTACA CAGTAAATGT AGTGGGACAA GCTCTATTCT TGTTGATAGA   48840
AAAACTCGAA TTTTAAATCT GCCTAGTTCT TTGCAGCTCG TTGTTGCTCC AAATCTCAGC   48900
TACCTTTTGA AACAACTTTT TTCAGTAAAC TTAATTTCAA TCTTCATGTG ATTTAACTGG   48960
ATCCAAACAC AGGCAGATAA AAAAGGTGGG GCATTACTTA TCAACCTCTA AACTAAGTTT   49020
AATTTTGTGC CCTCATGGAG TTTATAGTAT ATTTGAGGTT TAAACTAAAA CACCTGGTTT   49080
TAAACAGAAA CTATAAAAAA CACGATTAAT AGGTGAGGCC GGGCGCGGCG GCTCACGCCT   49140
GTAATCCCAG CACTTGGGGA GGCCAAGGCG GGTGGATCAC GAGGTCAGGA GATCAAGACC   49200
ATCCTGGCTA ACACGGTGTG AAACCCCGTC TCTACTAAAA ATACAAAAAA TTAGCCCGGC   49260
GTAGTGGTGG GAGCCTGTAG TCCCAGCTAC TCAGGACGCT GAGGCAGGAG AATGGCGTGA   49320
ACCCGGAAGG CGGAGCTTGC AGTGAGCCAT GCGCCACTG CACTCCAGCC TGGGTGACAG   49380
AGCCAGACTC CGTCTCAAAA AAACAAACAA ACAAAAAACA AATAGGTGAA AGGCCGTGAT   49440
CATTGGTAAG CGTAAGAAAA TCTGAGGGAG AAAAAAATAT AGATGCCCAG GCCCCATGCC   49500
AAACTCATGG AATCATGCAT GAAACCCAAG CAGCTGCAGT TTTAACAAGT TCCCAATATA   49560
TAGTTGACCC CTGAACAATG CAGGTTTGAA CTGCCTGGGT CCACTTATAA AATGGATTTG   49620
ATTTTTTTCA ATAAAAGTTA CACCGAGTGT GCCTGCCTCT CCTCCCTCCC TCCCTACATG   49680
CTCCTGCTCT TAAGCCTCTG CCATGAGGCT TAAGACAGCA AGAACAACCC GTCCTGTTTA   49740
TTTCAATAGT TTTGGGGGGT GCAGGTGGTT TTTGGTTACA TGGATAAGTT CTTTAGTGGT   49800
GATTCTGAG ATTTAGTGC AACTGTCACC TGAGCAGTGT ACACTGTATC CAACATGTAG    49860
TCTTTTAACC CCCATCCAAC CTTCTTCCCC AACCCGAATC CCCAAAGTCC ACTGTATGAT   49920
TCTTATGCCT CTGTGTTTTT ATAGCTTAGC TCCCACTTTT AAGTGAGAAC ATACCATTTT   49980
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FIG. 6.19

TGGTTTCCCA TTCCTGAGCT ACTTCACTTA GAATACTGGC CTCCAGCTCC ATCCAAATTG   50040
CTGCAAAAGA TATTATTTCG TTCCTTTGTA TGGATGAATA GTATTCCACG ATGTACATAA   50100
ACATTTTCTT TATCCACTCA GCTCCTCTTC AGTCTACTCA ATGTGAAGGT GACAAGGACG   50160
AAGATCTTTA TGATGATCCA TTTCCACTTA ATGATTAGTA AATATACTTA CTTTTCCTTA   50220
TGATTTTCTT AGTAACTTTT TTTCTCTAAC TTACTTTATT GTAAGAATAC AGTATATAAC   50280
ACATATGACA TACAAAATAC GTTAGTCAAC AATATATGCT ATCAGTAAAC TTCCAGTCAT   50340
CAGTGGGCTA TTAGCAGCTA CGTTTTTTGG GCAGTCAAAA GCATGGGGAA GGAGAGGGTG   50400
GTCCCTAACC CCTGTGTTGC TCAAGGGTCA ATTGTAATAA TACCCATTTA AGAATCCATG   50460
GTATATATGG TAAGTGCAAC AACTCTAGAA GAGAGTGCTA GGAGTTGGAA AAGGAAAGAG   50520
AAAACAGAAT TTAAAGCAAT CTGTAAAGGA CATGCAGGGT TTAGATGAGG TGGAAGGGTG   50580
AGGGAAAACC AACATCTGCT GTGAGGGCAT ATTAACTGCC AGACATTGTT CTATGTCTTA   50640
CCTCATTTAA GAGAATTTCA TTTCACACAT GGAAAAACTG AAGCCCAGAG AGGTTAAATA   50700
ATTTGCCTGA GGCCAAAATT AGTTAAATAA CAGAAGTGGG ATTAGTAGAT GTTTTCATTT   50760
TATCAGTGAA ACTGAGCCTC AGGGAGGTTA AATATTTTGT ATGAAGTAAC AAAACTGAGA   50820
TTAATATATG GCCAAGTTTA AATGAGATCT GTAAATCTAA TGCCTACACT AAAACAAAAA   50880
AAAAAAAGTG GGAAGAAAAG GTCTATATTG CTTAGCAAAA CAGAGGTAGG GAAGCAAAAA   50940
TAAACTTACA AAATCAGATT AGACCACCAA AAAACAGTCC CCATTTTAAC TTATGTGGTG   51000
AGAACCATAT ATTAAAGACC ACCAGTGGCT TAAAAATCTT TTTAAAAAAT GAATCTGTTT   51060
TCATTATTCA TTAGTTTTTA TCTAATGAAT AATGTATCTT AACTGATACA TTTACTAAAC   51120
AATTACCAGC TCCAATTAGC ACTCAGTTAC AATTCAATCA TTAAACTGAC CCTCAATTTA   51180
GCTGTCAACC TAGTCAAAAC AGTTAAGTGA TTTTACGGTC ATCCTCAGTT GCAGAAGTAT   51240
AATGTTTATG GCTGGAGTCA TTTTATTTTT AACTAACATT TTTTAAAAAG ATTGCTTTGT   51300
AACAATGTGT TATGAGTCCT TTGTGGTAAA TACTGCTTTT TTTTTGAGAC GCAGTCTCGC   51360
TTTATTGCCC AGGCTGGAGT GCAGTGGTGC GATCTTGGAT CTGAGGCTCC TGCCTCAGCC   51420
TCCTGAGTAG CTGGGACTAC AGGCATGCGC CAACGTGCCC AGCTAATTTT TTGTTTTTTT   51480
AGTAGAGATG GGGTTTCACC ATGCTGGCCA GGCTGGTCTC GAACTCCTGA CCTCGTGATC   51540
TGCCCACCTC GGCCTTCCAA AGTGCTGGGA TTACAGCTAT TTTAAGGACT TTTTAAAAAG   51600
TGAAGCTAAA CATTTATTCA TCCCTATTCC TCATCTATAG GGACTTGTGC TCTATTTTTC   51660
TTTGAAGACT GAAGTAAAAA TTCACCTTTG TGAGGGTCTT CCTATAATTA AAATTAATCA   51720
TTTTTTCCTC CATAGCTTCT ACAAAACATT GCCTGTACAA CTCTATTTAG CACTTATTTC   51780
ATCCCGCCTT GTATGAAAAC TATTTGTTTA CAAACGTTTC TACTTCTCTT TAGGAATAAG   51840
GACTATGCAT TATTCACTGT TGTATTCTCC CTGCATTTAT GGCAGTCCTT TGCACATTAA   51900
ATACAAGCTT TTTGGCTCTG TGCATCTCTT CATCTGGCTG TTCATCTGTA CCCTTTAAAA   51960
CATCCTTTAT TAAAAAAACA GTAAATGTAA AAAAAAAAAA AAGCCATTGA TGAAAAAGTT   52020
AATAGCTTTC TCAATAAGAA AAGAGTATCA ATTATGCATA CGTCTGAACT AACAAACATG   52080
AATGAAATAG GCTATTTAAT ACATTCTGTT TTAAAAGTAG GTTTGGTCAG CCATGTAAAT   52140
TGAAAATTGG GAGCCACCAA GATAACTCAT CAACAAATAT GCACTATGTA CTAGGCACTA   52200
TATAGATGAT GGTGAACCAA ACAGATGTAA TCCTTGCTCT TACAGATCTC ACAACCTACT   52260
ATGGGGCCAA AAATATATGT GTATGTGTGT GTGTTATACA TATATACACA CACATACATG   52320
TATATATACA TATACACATA CACATATATA CATACGCACA CATACACATA TATACACACA   52380
CATACATATG CTATGAGGAA AACAAACAGG TGGTGAGAAA GAATTAGAGT AGGGGTAGAG   52440
GACAGAGGGC TCCTCAAATA GGGTGGACAG CTTGACACAA GACACTCGAG CTAAGACTCC   52500
AAGGATGAGA AGACAGTTAT GTAAAGAAAA GGGGACTAGC ATTGTCAGCA GGTAGCTAAG   52560
GCCTTAAAGC AGACAGTCAT GTGCTGCAAT GCCAGCTTCA AGCGAATACA GTTACTAAAG   52620

FIG. 6.20

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CATATCTAAC CTTCTATGTG AATGTAGTTA CTAAAGCATA TCCTCCAACT TTCCATTTTT   52680
CTTTTGCTAT TGTTTCTACC ACTTCTCCTT TTCTGTTGAC AATTATTTTA AATTTCCTGG   52740
CTAAATTAAA TGATGGCATG AACTCTGGGG AAAGTAAGAC TACCTATGTC CAAATAATCC   52800
TAAATTCCTT CTAGTCCTTA TGACTGATCA ATTCACCCTG AAGTGACAAC TATGTCCCAA   52860
TTAGGAAAGA GTGTTTCTTT ATCTGCACTT AATTTTTTGA TTTGGAGGCT TCCTGATTGC   52920
TAATCAACAT GTTGTGTGAT TACTTCAACA AGTACTTATA GAACGTTATT TTGTCACTGG   52980
AAAAACGTTC TGCTGCTTTC TGAACTTTAG GTTGCTCTAG AGTCTAGGAA GAGTGACTGT   53040
ACCTAAAGCA GTTCCTAATT ACTGGACATT CTCAGATCTG CTAGAGCTAC ATGTCCAATT   53100
ACGAGAATAT ACTGGAAAAA GCCCTGGATT AGAAATGAGA GGATGTAGGT TTTAGTACCA   53160
GGTCAGCCAC CTTGTTAATG CAAATTTGAG TAAATTGTTA CTTCTTTTAG GCCTTGTTTT   53220
TGCTGTTTTG TTTTTCTGAC AGTATGGTCT CTGTGGTCCA GGCTGGAGTG CAGAGGCACA   53280
ATATCAGGTC CCTGCAGTCT CTACCTCCCA GGATCAAGCC ATTTTCATGC CTCATCCTCC   53340
TGAGTAGCTG GGATTACAGG CATGTGCCAC CACACCCTCG AACTCCTGAC CTCAAGTGAT   53400
CTGCTTGCCT CAGCCTCCCA AAGTGCTGGG ATTAGAGGTG TGAGCCACTG TGCCTAGCCT   53460
TACACATTGT TTTCTTACTG GTAAAGTGGG AATATCTAGA AGTTGCATGC TACATAAATT   53520
CAACCATATA TTATTGGCAA AAAATTTTAA AGAAAAACAT CAGCTTAAGA GTACTAATTG   53580
AGTACATGCC TTGGAATGAG CATGAGCTGG AAAGAACAAA CCTGTTGTTA CATCACTCAT   53640
TGCTGTTTTC ATATGCTGCT CATTGTAAAT CTTGCTCAGT GGCATGATTT TAGTGTTTAA   53700
AGATTTATTT GTTTGTTTGT TTAGGACAAA GTCTCTACAC ATAATCTACT TGCTTCATAT   53760
ATACATACTT ATGCATATTA TGTATGTACA TACATGCTCT CAGGGCTCAC ATGAAAAAAC   53820
AGCCATTCAG GTGATGTGAT TTATCTCATA TGCTTACTTT AGAGTCAACA GGGTGTTGAC   53880
TCCACTATAC AATACTGGCA TGGAGAACAC ATAAGTCAAA GTAGACAGGA CCCAGCCGTA   53940
CCATTGGCTA GGGCACAAAT ATATTCACAT ATGTGGAGAA TGATGTACGT AGAAAGGTCT   54000
TCATTGCACA ATGCTCTTTA ATAAAGATCT GGAAAAAAAA AACACCTAAA TGTTCAAAAG   54060
GATAGGGTAG ATGAAATAAT GGTACATTAT AAAATGGAAG ATTATGCAGC CATAAAAATA   54120
AGGAAATACC TTAAATAATA ACAGAACAAC TTTTAAGGTA AGTGAACAAA TAAGGTACAT   54180
AATCACTATG CATAGTATGT ACCATTTACA TAGAAAAAGG GAAGAAAAAT AAAATATATA   54240
TAGTAATTTA TTTGTTCTTA CATGTGTAAA ATTTTTCTGA AAAATATACC AGAAACTGGT   54300
AGCACTGGTT GCTTCCTAGG CAGAAAATGA CTGAGTATCC TTTTGTACCT TTTGAATTTT   54360
GAACCACGTG AATGAATGTG TTACCTATGA ACAAAATGAC AAGTTTAGAT CAGCAAGACA   54420
GCAGTTTGAG ATGAAATGGG ATTACACCCT TAGTAGGAAA AACTTTTTAA AGCAGGTGGT   54480
ACTTCTAAGA GCAAATACCT GCACATGGAA TGTTGAAACT ATAAGGAACT CTCCTTAAGA   54540
GATCCATCTA TTCCAAACTT CTCATTTTAT AGATCTGTAA ACTGAGACCT TAAAAATTCA   54600
GTGACTTGCA TAAGGTCACA CAGCAGAAGA GATGGGATTA GATGCTAGAT ATTCCAATAT   54660
CAAGTTTAGA CTATTAAAAA TTCAGTGACT TGTGTAAGGT CACACAGCAG AAGAGATGGG   54720
ATTAGATGTC AGATATTCCA GTATCAACTT TAGACTATTA TCACACCATC TTCTCATTTT   54780
CTGGGGGCAA AACAGAACCA AGTAAGTTTG GGCTACATTA CGAGTTGTCA TGTTTTTGTT   54840
TTTGTTTTTT TGAGATGGAG TCTTGCTCTG TCGCTCAGGC TGGAGTGCAG TGGTGTAATC   54900
TCAGCTCATT GCAATCTCTG ACCCCCGGGG TTCAAGCAAT TCTCCCTGCC TTAGCCTCCC   54960
GAGTAGCTGG GTTTACAGGC GCCTCCCACC GCGCCCGGTT AATTTTTGTA TTTTTTTTTT   55020
TTTTTTTTAG TAGAGACGGG GTTTCACCAT CTTGGCCAGG CTGGTCTTGA ACTCCTGACC   55080
TCGTGATCCA CCCACCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GCCACCACGC   55140
CCGGCCGAGT TGTCATGTTT TATCTAAATT TTAGAGTCTA ATGTATAAAT TAACCTTAAG   55200
CCCTGAAACT ACTAATTTCT TGTTTGGATC ACTATACGGC TACACTTAAA AATATGCTGT   55260
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FIG. 6.21

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GCATACCTCT ATCATTGCAT GTATACAATA TGATAGATGC ATGATATGAC AGACACACAA   55320
TATGATACAC GTATTTTTTT CTATCCTAAC ACATCTGAAT TTACTGAAAT AACTAAAATG   55380
TCTTAAGTTA CTTTTTTAAA TATACACATG CATAGCACAA GCGTGTTGCC AAAAATATGA   55440
ATACAGGTTT ACAATTCCTT AACTAAAACC CAAGGGTTGG ATGTGTTTTA GAAATAAGAA   55500
TTTCATACAA TTTTTAAGTG TTACAGGGTA TATAAACCAT TATATAACAC ATACCAGGGG   55560
CCAAGGGCAG CACCCCATAA TCAAACATAT TAATATAGTT TCAGCAAAAC ACATGGGATA   55620
AAGACTATAT ACAGCTTCTC AATAGTTCAG GTCATATTTT GCTACCAAAT GAATTTTGTT   55680
GCCAAGCTTA AGAAGTTTTT GGTTTTCACC GCTTTCTGAA TGTTAGATTG AGATGTGGGA   55740
TTACAGACTG TACTCATAGA GTGCTTCTAG AAAGCAGTCA GTCACTTCAA CTCTCATTTT   55800
TTTTTTATGA GACTAAAAAA GAAATCATAG CAAGTAGCTT TTATATCCCA GGTTTGGGCC   55860
AAAGACTTGT ATTGTGGTTA AGGAATCTAA CTTAGTAGAA GGTGCACGAG CTGACATCGT   55920
GAGTGGCTAA AATGAGAGAA AAAAAGAGAA AATCCTAATC ATACAGAAGC ACTGAACTAC   55980
TGCAGCTGTT CGTTAGTTAT TAATTTAATA AAAGCTTCCT CCCTTTAAAT CATGTGAGTT   56040
TATAACTGGA AATAGGTCAA TAAAATTTCT GTCCCACACT GCTGACAAGC GATGGACGCA   56100
ATTAGCTTTA ATCCCACTGG AAGGTACTGC ACTCTCTCTG GGACCAGGAT ATGTAGAAAA   56160
AAGCATTTCA AATATATAGG AATAACCAGA AATGTATACA GTATTCTCAA CTTGGGACCG   56220
TTACTCTATA ATATAAACGA AAGGGGTTTT CTAGTCAATC TCTGCTGATC TCCTGTACCA   56280
AAGTTCTTCC CTTTATAAGT CTTGTACTAC CTTTTACAAG AGGAAAAAGC TCTAGAGCGA   56340
AAACACAGAA CACACTAAAA TCCCTTCCTT TCTCTTTACA ACTCAAGCCC CGCCTCCATT   56400
TTGTTTCTGT TACTAATTTT TCTTCTGAAA AAATACCAAA TTTACACTGA AAGACTAAAA   56460
TTCAACTTTG CAGACAACGT TTTAAAAAAT ACAATTCAGT TTGGTGATGT TGTTTTTGCAG   56520
TCTTACAATT TTAGCTACAT TTTAACTGAA CCAATTGTTT TGTTCAATTT ATGAGTTAAT   56580
ACTCAGCAAG TTTGTTTTTT ACAAATAGTG TATTCCATTC TAAAAATGGA AGTAGCAGTG   56640
GTGAACAAGA AAACAACCCT CTGAGTTTTG TCTATTTCAG GAGGAAGTAC TACTTTCTCC   56700
AATTTTAATC ACAATTCATA AAAAAGAAAA ACCTAACTAG CTAGATCTTA AATATACAAA   56760
TACATTAACA ATCTAGTAAA GCAACAGAAA AAGGTAAACA AACTAACCAG CCTATTTTTG   56820
TCTGGAGAAA CCCCAACAAA CTGCTGGATT CCTTGGCCAT TTGCATTCAG AAGTACCAAA   56880
AACTAAAATC CTTTTTACTA AATAATTTCT TCTACACGAG ACTTGTTTCC TCCACACCAC   56940
CCTATCCAAA TTGTCAGCAT TATTCCAGAA TATAATCATT TAGTTTGAGA CCACTAAAAA   57000
ACCCCGCAGT CCAAAATACC AATTGTGGTT TTTCTGTAAA GAAATGGTCA GAAACTACAA   57060
ATTGTTATCC TAGGACACAG AACCAATCGA CCAAAAGGAC TTCTGGAATA TGCTGCCCCC   57120
AAGATTTAGA ATGCACAGGC AGAAATAGCA TACGCGGTCA CGATGTCCCT TAAGCCACAT   57180
GACCTTCCTA CGAAAGCAAA GGCTTAAACT TATCAAATGA GAACTCCCCC TTTCTCTGAA   57240
GTTAAAACAA GGCAGGGCAG CTGGAATTAG AGCAGCAGGG ACAGATCGGC TGTTGACTAG   57300
TCAGAACGGG TCGTGGAATG CAAAGTCCCT GCGCTTTCGC TGCTCCCCTT ACCGTGAGAA   57360
GATCTGGGAG GGAGGAAAGG AGGAGAAACA CCCCAGAATC CTGGTAGAAA AGCCCCTGGC   57420
CTCGAAGATG GGCTCTAGGG AGACAGGGAG GGGCAGCTCC GTGTGTGATG ACCCTTTGTG   57480
AACATGCACT CTGTGGCAGC TTCAGCTCCA CCGAGGCTTT GGGAGAGCGG ACTACGGATG   57540
CCCGGCGCGG CCCAGCTGTG AAGGCCGCGC CGGCGGAGAG GGTCCATGGC ACCCCGCCG   57600
GCTTCGGAAG CCCTTCCCTC TCCCACCTCC GCGGGTCACC CCAGGAACCA GCGGCTCCCG   57660
ACCACGCTCG CGCGGACCAC GGAACAGCGA CGCGCAAGCA GGTCTCTTTC GTCAGCGTAA   57720
TCCCTCCGCA GAAAGCCGCG CACTAGTTTT AATCACGCCC CACCCCCTGG CCGCTGGCGC   57780
CACCTCCGCC ACTCGGGCGC TTTCCAGCAG CTTCCAGAAA CGTCGCCTCC CCAAACCCAG   57840
CCACTCACAC ATGGCGGGCT CAGCAGCCAC CGGCCCCGCC CCTCCTCGTC GCCGCAGTCG   57900
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FIG. 6.22

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CAACTGCGTC TGCGGCCACA GGGCGGACAG CCACGCCTCT GCGGAGGGCG ACCGGAAGTG    57960
CTCACGTCTT CACCTTCCCC GCCACGCCAC CGTCCTTTCA GGCCCAGCGT GCAGCAGGAA    58020
GGAGGACTCT TTTGCCGCGG ACTCAAGCCG GAAGCCGCCT TCCTAGTGGA GACGCGAGTG    58080
GGGGAGGAGC AGTCCGAGGG GAACGTGGGT TGAACGTTGC AACTAGGGTG GAGATCAAGC    58140
TGGAACAGGA GTTCCGATCG ACCCGGTACC AAGAAGGGGA GTGCCCGCGG CAGGTAAGGG    58200
AGAAGAGGGA GGGGTTTCTT TCCGCTCTCG AAATTGGGAA AAGAGACAGA GCTGGGATGA    58260
CCTATGGGGT AGTCGGCGCG CTGAAAGGAT GGGCTGGGCT GGGACGGGGT TCAAGTGGGA    58320
AAGGTTGATG ATTAAGGTAT AGAGTTGGAC TTACAGATCC GTTTGGGCGC AGAGAGGTGA    58380
ACGCTGAAGA GAAACCAGAG TTTGTTTTCG TTTTCCAAGG AGCGTGGAGA TGGGCAGGGT    58440
TAACGGACCC TGCGCCTCCT TCGGCTTCTT AGTTTGGGTG TTGAAACTCA CCTCCTTTGG    58500
TCCTGTTCGT CTCTGATTCA AGACAGTTGG GTTTGGTACC TGACAGGGCT GGGTGCAGAA    58560
AGCTGACCCT GTTCCTCGGC TTCCAGGTCG GTTGTGGCCT CGCTTTTGAC AGTTCACGTG    58620
CCGAGCCTAC TCGCTCTCGG AGGGCGAGCT CAAATGGGTG GGTTTAAGGC CCCCTCTTCG    58680
AACAGCTGTT TCCCTGGGTT TCTCCATTTT GCACACAGGA GTGTGAATTA AGTTTAATTG    58740
AATACTTTTT GCGATTCCCA GGGCCACCTT GACACGTTCA TTGTGCTATC TAACTGGGTT    58800
CATGCTGGGC TAATAATTCA CATTAAGGCT TCTGGAGTAT AAGTGGTTCA CAGAAGTATG    58860
AAAAGGGGAT GTTAGAAGAA AGATGCTGGG GGTGAAGTAG AGTTGAGGAA GACAGAACTG    58920
GAAAGCTAGG TTGGTTTCAC AGTACAATGA GCTTAGGTC ATAATACTAC CTTTAGGTTA    58980
TATTGGGCTG TTTGGACGGA GTTTGCTGTA ATCAGGCTAG AGTAAATAGA GAATTTTAAA    59040
CTAAGCATTG ACAGGCTCAG ACTTGTAGAG GCATCATTTT GACAGTGATA TGGAAGGGAA    59100
AGAGGTAGAG ATTTGAGACC TTTCCAAAGA ACTGTCCACA GAATTTGGTG ACTTACTGTG    59160
CGAAGAGGGA AATAAAGAAT AGGGAACAAC TCAAGACTTT CTAGTCTGTG TGTTTGGAAG    59220
GATGGAGACG CCCACATTTA AGTGAGATAT GGGAAGGAGG AGCAGATTGT TTTTGAAGGG    59280
AGGAAGAGCA GTTACTTAGG GTCAAATTAA GTTGTAAAAT CCCCCCCGGG ATTTTGTATG    59340
TAAGTCAAAG TGAATTGTAT TTGGAAGAAG AACTGGGGAG CCCACCTCTG GTATTTTTTT    59400
TATGTCCCTC ATATGGACAA ATAAACCTCT GGTATTAAAT GAATTTTCTT TTGGGGGATT    59460
CTATATATTC GGGATTTCAA CCACCAACCT ATCTGGTTTT TCCCGCTGAA ATGTTGGGTG    59520
ATGGAATCAG GAGAGCAGAT TTGGAGACTC TTTATATTTT ATAATTGAGA GAGACAAAGA    59580
GAAAACCGTT TGATTTGAAA AAGTTTTCTA GGTTCCCTCA GGTAGATGGA AATTTTCATC    59640
AAAAACAGTT TATTCAAGGT ACATAGCCTA CTAGTTTCCC ATTTGAGAGT ACCGCAGAAT    59700
GATACGACGT GTACTGCTTC TCTACGCAGA ATGAAGTATA AAATTAGCAC CAAATAGTAA    59760
CTTTAATTTG TCAGGTGCTA AACTTTTTAC ATGCTTTATC TCATTTAATT CTTAGAAGAA    59820
ACTAATTTTA CAAGTAAGTG TCTGGACCAA CATCTGCAGG TACAAAGCCT GAAAAGCGTA    59880
AGTTTGACTC CTACATAGTT CTCTTTTGTA AGTAGATTAT AAATAGAACC AGCCAAAGGT    59940
AATAAGTTGT CTGTGCCTAA AAAGAAAGAA AAAGTTAGC ATCAGTAGTT CTCACCAGAA     60000
GGGGTGATTT TGCTTACCAG GGGACATTTG GCAAGTCAGG AAACTTTTGG CTGTTGGATC    60060
TAGAGGGTAA AGGTCAGTGA CGCTGCTAAA CATCGTCAGT GCATAGAACA GCCTTCACAA    60120
ACAATTATTT GGTCAAAGAT ATTTGTAGTG CTGCAGTTGA GAAATTTCTG TCTTATGGTT    60180
ATTTCTTCAG GAATAGGAAA TTAAGATTCG CCGATACTTT CTTTAAAAAG CAGTTTTATT    60240
TTTGAAATTA TTCCTTGGCT TGAAAGGTTT GTGAAGTTTA TATAGCCGAA CCAGAATAGC    60300
GTAATTAGAT TTTAAAGTGA ATTGTGAGCC ATCGATTCCC AGGAGATGGG TGTCATAGAA    60360
TCATGGATTC TTGGATTTGG GAAAGACTTA TGCCTAGAAT TATTTTACAA CATTTCTGCT    60420
AAGTGGTAAT TCTCCTCTGC CCTAAAGGTC TCCTGTATTT GATTTTCCTA TCATTGTGAA    60480
CCCACAATTA AAATGCTCTT AATTATTTTT TGCTTACACT GAGCTCCGGT CTCTTGTAAT    60540
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FIG. 6.23

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TTTTACTCTG TTAAATGTGG TTCTGCACCA TAGGACTGCA CTCAAAACAA GCTTGCCACA   60600
TATGTAATTT GTACTAGGAC AGTGTTTATA TTTTTGTTCA GATAACAAAA TAAGTTAAAT   60660
GTGGTGTAAA TTAGATCATT TACAAATAAT AATTTGTTAG CAGCTTTTAA TAAGTAGTAT   60720
TTTTCCCAAC TGGTGAAGTA TTAATGTTGG TAGTTGAAAA CAATAGGAAT GTATGGAATA   60780
TATGGTTCAC TGGTTCTTTT GTTCCTGTCA AATAGTGGCA CAATGGATCT GGGGTTTTTC   60840
TCAGTATAAT GCTGGCATAT TTGTTTCAAA TTGTACATAG ACTCTAAAAA GTTAGGCTTT   60900
CAAATTCTGG TCAATATAGT TTGCTTTAAA TAGTAGCTGC CTCTACTACA AGTTTTATTT   60960
AATTTGTTGA CAAATGAGTC TGCTATGAAA ACCGGTCCTG TTGCCAGTCA CTACCCTCTG   61020
TTCACAAATT TGCTGGGTTT ATAAATATAG GTATCATTTT CACTTCAAGA TTATAATTTT   61080
AGAATATGTT TATTCTAGGA CATATAGCCC TCAAAATCTG CTTACTATAT ACGTCTTATA   61140
AAATAGCATG GTTCTTTTTT ATAGTAAATA GAATTTTTAT TTAATTGTCT ATTGACTTTT   61200
TTTTTCCAGG GTTCATTGAA AAAATCCTTA GTGATATTGA CATGTCTCAA GTGACATAAA   61260
TTAGCCAATG ACTCGGAATG ATGGATTCTC CGAAGATTGG AAATGGTTTG CCAGTGATTG   61320
GACCAGGGAC TGATATAGGG ATATCTTCAC TCCACATGGT GGGGTATTTG GGAAAAGTTA   61380
GTGAACTTAT TTTTTGCCTG AGTGCAAAGT TTTTTTTTTT TCTCTATTTT TGAGACTTAA   61440
ATTCAATTTT GATGTTACCA GTTAACTTCT AAAAAATTGT GTCTTCCACG GAAATCTTAC   61500
AGTAATGGCG AAAGATTGTT TTAATGTGTT TACCTTTCTG TGTTTTATTG ATACATGAAA   61560
GTGGAAATAA AACATAGACC TTATGATTTA CTGTTCTTTG AAAATATGGT ACATAAATTC   61620
TCCCGGGTAA TTGATGTTAC TTTTTTTCCTT GCAAATAAAA TTGATACTAT TCTTAACACA   61680
TAAAATTTAA TATTTAAAAC TATAACATAA TTCTTTTTGG AATAATAGCT GTATTTAAAG   61740
GCTTATATGC ATTTCTTTTG TTTGCCATGT TTAAAATACC TTGTCAGGAT ACTTGTAATT   61800
GAAAATTATA ATTTTTTCTG GTTACCTTTC CATTTAACTT TTAATATTTT GATATATTCT   61860
AGGAATGTCT ATATTTTAAT TTGCTTTATT TCTCTTTTAG AATTTTGATT CAGCTAAAGT   61920
TCCATCAGAT GAGTATTGCC CTGCTTGTAG AGAGAAGGGA AAGTTAAAAG CCTTAAAGAC   61980
TTACCGAATT AGTTTTCAAG AATCTATCTT TTTGTGTGAG GATCTGCAGG TAAAGTATTA   62040
ATCTTATATA GTATATATAA GATTTTTCTT TTTTCTTTTG CTTTTTTATT AATTGTTTTA   62100
AAAGTTTACT CATTTTTTGT TTTTTAGACT AGATTTTTAA TATGTAATCT CAGTTTGTAA   62160
GTCTGTCTGG TATACAATGT TATTTTTCCA CCTACCTTTA CTTGGTTGCG TAAAGATGTT   62220
CGTTTTTATT GCCATTTGAT TTGCGAGAGG AGAAAATACA TTTCAAGGTT TTTTTCTTTT   62280
TTTTTAACCT TTTGGAGGTC CTTGTTAGCT ATTAGCATAT AGTAGTTACT CTCTCATCTC   62340
TTTGGTTTAT CTTTGCAACT GATGGGAAAA GTTATGAATT CTAATGTAC CTGGAAGAGT    62400
ATTTTGGAAA TTGGTTAGTC CAAAACCAGT ATATATACTC TGAACTAAAG AGAGTATAGA   62460
ATCTTGTAAA TTCTAAAAGA TCCTTTTAGA AGCTCTAAAT CGCTTTTAGA ATTATAGTAA   62520
TTTGTACCGA CTGGTACGGC TTTTATATAG CAGCTCATTA AATTCTGTAA TACTCCACAT   62580
TTTATTGTAT TTGACAGTTT ATGAGACTGT CTCATACACT TTTAATTCTC AGAACTTTGC   62640
AAGATTTGTA TTCCTATTTC ATGAATAAGA AAATAAATTG ATTTCAGAGG GTTTGGGAAC   62700
ATAAGATCCT GATACAGTGG CAGAGCTGTG GTTGGAATAC AGACTTCTAA TTTCAGATCT   62760
GTTTATTCCA GCAAAAAATT AGCAGTTCAT CAGAATTACC TGGAGTGCTT TTAATAAATT   62820
TCTGAGTATC ACCCCCAGAT GCTGATTCAA TAGAGTTGGC CCAGAATTCT GTGGTTTTGT   62880
AACATTTGAG GATGAGTCTG ATCATCATCA GCCAGGTTTG GAAAATACTA GACTAAATCA   62940
CATGGTTGTT AATAGATACT TATGCTGGGT ATAATTTGAA GTAAAGTAAT CCCAGGCGTG   63000
TCTACAAATA TAAATTTCTT TATGTTTATA TTCAGTAATT TTTTTTATGA GTGTCACTGT   63060
TTGGCACTGT TGCAGATACA ATGTTAGGAT ACAATAATAA AACAAAAATT TCTTGCCCTT   63120
AAGGAAGTTA TGTCATAGAG TGGGAAAGAC AGTGAACAAG TATGTGTTTT TCTGTCAGGT   63180
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FIG. 6.24

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GATAAAAAGT GCTGTGGAGA AAAATAAGGC AGTAGGGACT GGAATGCCAA AGTAGGGGGA   63240
GTTTGCAATT TTAAATAGGA TGGTGAGGGG AACGCTTCAA TGAAAAGTGC AATTCGAGCA   63300
AAAGCCTGAA AGAGGTGAAG AGCAGTGAGC TTTCTAGGCA GGGGAAGCAA GTTCCAGGAA   63360
GGCCCTGAGA GAATGGAGGC TGCCTGTCAT GTTTGTGCTA CTGCAATGAA AGCAGCAGAG   63420
CGATAGAAGG TGGATCAGAA AAATAATGGG GGAGCTGGAC CAAGTAGGGT CTTATAAGCC   63480
ATTGTAAGCT TTCTGGCTTT TACTATGGGT GAAACCAGGA ACCATGGCAG AGATGTTGGC   63540
AGAGGAGTGA CATAAGTTGA CTTCAGTGTT AAAAGCATTA CTGTGGCTGC ACTGTTGAAA   63600
ATATATGTAA TGGGCAAGAC CTGAAGCAGG GAGATTAGTT ATAGTATAAT ATGAATTATA   63660
TTTGGTCCTT GTCTATGGTT TCCGTTACAG AGCTAAAAGT CTTGGAATTT CCTGAATGAT   63720
AAGAGTGTCC TGTTATTCAG AATGAGCCTG TTTGCTAACA CCGGGGTTCA TACTATTGTG   63780
GTGACTTAGG ATGGAGCCGT AGATAGCCTC AGATGGGGCA AGTAGCTGGA AAGACCACAT   63840
GATTAGAGAA TTAACGGGTT AGAACTTTTA GCCCCACGTA CAGGCCTCCA GGAAAGGAGT   63900
GGAGGGGCTG GAGATCAAGC TGTATAAAAA TATCAAGATT TGGATTTAAT GAGTGGGTTG   63960
CTGGGGGCTG GTGCCGTGTA GGAGGTGGTA TGCTTAGAGG AAGTGGAAGC TTCATACCTC   64020
TTCTGTCCCA TACCTTGCCC TACTCATTTC TTCATCTATA CCCTTTATAA TATCCTTTAG   64080
GATAAACCAA TAAACATAAG TAAGTGTTTG TTTGAGTTCT GCGAGCTGTC CTTGCAAACT   64140
AGTTATGCCC AAGAAGGGGG AGTGGGAACC TTTGTAGCCA GTCAGTCAGA TGTACTGGTG   64200
GCCTGGATGT GGGATTGGCA TCTGAAGTGG AGGGAGTCAT GGGACTGAGC CCTCAACCTG   64260
TAGGATCTGA CATGGTCTCT AGGTAGATAA CATCCAAATG GAATTGGATT ATAGGATACC   64320
CATTTGGTGT CCTCTGGAGA ATTGCTTGGT GTGGGGAAAA AGCCCCCACA CATCTGGTCA   64380
CAAAAGTGTG CTGGGAGGAT AGAATATGTG AAAATTGTCA TAATCAAAAT GGAGTCACTT   64440
GTGTTAAAAA AGAAAAAAAA ATCCTGACTG GCCAGGCACA GTGGCTGACA ACTGTAATCC   64500
CAACACTTTG GGAGGCTGAG GCAGGAGGAT TGCTTGATCC CAGGAATTGG AGACCAGCCC   64560
ATGCAACATA GTGTGGCCTT GTCTCTACAA AAAAAAAAAT TTAAATTAGC TGGGCATGGT   64620
GGTGTGAGTC TGTAGCCCCA GCTACCCGGG AGGGGGACTA CGGGTGCACG GCACCATGCC   64680
CAGGAGGTCC AGGCTGCAGT GAGCTGTGAT TGTGCCACTG CATTCCAGTC AGGATGACAG   64740
AGTGTGAGAC CCTGTCTCTA TTAAAAGAAA AAAAAAGAC AAATAGATCC AGGAAAGGCT   64800
ATGAAGAGAG AGCTTTCATG CATAAATACC AAAATATCTC AAAAGACTCT GCAAAAACCA   64860
CACCCTTGCA CAAAGGCCAT CATGAAATAC TTCTGAAATA CACAGAAAAT ACATCATGAA   64920
ATAAATACAC AGAAAATACT TCTGCAAGGA CATCTGCCCA GCAACTGCCT GGTCCATCTG   64980
TGGACGGGTG TCATCCTTGT TATTGATCCT TGTAGCCAAG GGTAATTATC TCAAAACAAG   65040
TATGTGATCC TCCTTATTTT CCTTTAAAAA CCTTTTGTCT TCCCTTACCT CCCTGAACAC   65100
ACACAGTTTA CTATGGCATG TGTATTCCCA TTGGAATACT TTATTCCTGA ATAAATGTCA   65160
CTTTCTTTTT AGAAGCTTCT CTTTTCTTTT TATTTAGATT GATAAGTAGA AAGGAAAAAA   65220
AGCTTTTTTC CCTTTGGACT AGTTGAAGGC AGTTGCAGTA TTCTGGGGGA GAGGGTGGTG   65280
GCAGAGGTGT TGAGGCATGG TTGGAGTTTA TTTATACTTT GAAGGTAAAG CCAACAGGAT   65340
TTGCTGAAAG ATTGGGATAT GGGGTTGGAA AGAGGAATCA AGGATAGTTC CAAGATTTTT   65400
GGCTTGAAAA ATTAGAAGAA TGGAATCGTG AATTACTGAG CTGGGAAGAC TTGGAAGAGC   65460
AAGGTTTTGG GGAGAAGATC AGGACTGTAA GAATAGAGAA GTCCTTGTCC CCAGGAGTTA   65520
GGTTTTTGGC TATTAAAGTT AGATGTACTA CATAGATTTT TAGTTGGTTT TTTGTTTTTT   65580
GTTTTTTTTT TTTTTTTTTT TGAGACGGAG TCTCGCTCTG TCACGAGGCT GGAGTGCAGT   65640
GGTGCGATCT CGGCTCACCG CAACCTCCGA CTCCCTGGTT CAAGGGATTC TCCTGCCTCA   65700
GCCTCCTCAG TAGGTGAGAT TACAGGCATG TGCCACCCAG CCCAGCTAAT TTTTGTATTT   65760
TTAGTAGAGA CGGGGTTTCA CTATGGCCAG GATGGGCTTG ATTTCCTGAC CTCAGGTGAT   65820
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FIG. 6.25

CCACCCACCT CGGCCTCCCA AAATGCTGGG GTTACAGGTG TGAGCCACCA CGCCCAGCCC   65880
GGAGTTTTGG TTTTTGAAGC ATTCTTTTTC AAGTGATAAA GCAAAAAATA TATAATCAAG   65940
AATTTTAAGT ATATACTTTG GAAATGTTAA AAAGGAACAT GAGTAATTTA TTATTATTTT   66000
TTTAATTTCT AGTCAGCAAT GAGAGCCCAG TGTACTTTAT GAAGTAGATT GGTTTACACC   66060
AGGAGTGAGC AGACATTTTG TATGATGCAC AAACAAGGAA TGATTTTTTT GTTTTTTAAA   66120
TGGTTAGGAA AATATCAAAA TAAAAAATGC CAGAAAAAAT CAAAGAAGG GCCAGGTGCA   66180
GTGTTTCACA CCTGTAATCC CAGCACTTTG GGAGGCCAAG GTGGGTGGAT TCTCTTGAGG   66240
TCAGGAGTTC GAGACCAGCC TGGCCAACAT GGTGAAAACC TGTCTCTACT AAAAATACAA   66300
AATAGCCGGG TGTGGTGGCA TATGCCTGTA ATCCCAGCTA CTTGGGAGGC TGAGGCAGGA   66360
GAGTCGCTTG AAGCCAGTGG CAGAAGTTGC AGTGAGCCAA GATTTGAGCC ACTGCACTCC   66420
AGCCTGGGCG ACAGAGGAGA CTCTATCTCA AAATAAATAA ATAAATAAAT AAATAAATAA   66480
ATAAATCAAA AGAAGAATAC CCTTTCATAA TATGTGAAAA TTAAATGAAA TTCAAATTTC   66540
AGTGTTCATA AATAAAGTTT TACCGGAACA TAGCCATGCT CAATCATTTA TGTATTGTTC   66600
ATGGCTTCTT TTGCATACAA CAACAGAGTT GGGTAGTTGT GACAGACTAT GTAGCTCATA   66660
AAATCTAAAT ATTTATTATC TAGCCCTTTA TCAGTAAACT TTGCTGATCC CTGTATAAGT   66720
CCTCTGAATC AAATTATTTC CAAAGAGTTC CGTTATAAAA TTTGGAGTTT ACTCTGCTGT   66780
AAATTGCAAA GAACCATTTG GAAAACCTCT TTTAGTCAGG TATTTACATT AAAATGTTCC   66840
TTGATTTGTA AACACTAATA TTCAAGACTG GTCCAAAATT ATACCAAATT GAAACTCTCA   66900
AGTGTTTTTA AACAGTAGGA AGTTTTAACT TTTTTTTTTTT CGTGGAGTAG TCTATCATTC   66960
AGCGTTTACT TTGGAACATT TAATTAGTCT TTTTTAAAAA CCCATGAAAT TTATAATAAA   67020
AATTTTAAAT CATTAATGTT GAGTAATCAA AGAAAACTTT TTTTGTTTTC TCCATTTGTA   67080
AAATGAGTAC ATTATTATTA TAATTTGTCT TTGGCCATAC CTTGTTGATA ATTACTTATA   67140
CAAGTATAAG AAGACATGGT ATGTTTTCCT TTTTCCTATT TCACAAGAAT AAGTACAGGA   67200
ATTTACTTAA GCTGCTCCAA AACTCAGTGA AAGAGACAGG ATTAGGTTTT TTTCAGCATT   67260
GGATTTTAAA TGATACTAGA TGGTTGCGCT GGGCTAAAAT ACTAATGCTT TGTGTATATT   67320
TTTATGACTT TTTTGAAGAC AGCTTAAAAG CTTTATTCTA GTTATAAAAA TGATACATGT   67380
TCACTGTAAA TAGAAACAAG TCAGGTATAC AGAGATACAA ATATTTAGAA CATGTGGAAA   67440
GAGGCAACAA AATTTTATAA AAAGAAAAAA GATAAAAATC TGAAATCATT AATTTATAAG   67500
GGAAAAATCA GGGCAAGGAC AAATTATATT ACAGATTGGC CTATGGTGGG AGCACAGATT   67560
ATATAGAGAA AAGTCAGTGA AGACACTTGC GAAGAGTGTG GGTGGAAATC ACTAAGTTTT   67620
GCAGTCCCGG GGCCTCTTAT GGTTATTAC TGTTTTGTTC TTTTTTTTTT TTTAATATGC   67680
ATTCCTTTGG AACCAAGGGT TTATTATGTT TTGAATAAAG TAGAGGTGTA AGTAGGATGC   67740
ATATACCATG ATCTTGACTA CTTGAGATTC ACAAAGGGTT TTCGTCTCAG GATTTTTTTT   67800
TCTCTTAAAA AAATTTGTAT TAATTTTTAA ATTGTAAAAA AATTCATCAA CTTAACCATT   67860
TTTATGTATA GAGTTCAGGA GTATTAGGTA TATTCACTTG TGCAGCAGAT CTCTAGAACT   67920
TTTTTCATCT TGCAAAACTG AAACTCTGTA CCCATTAAAC AACCACTTCC CATTTTCCTC   67980
TCCCCCAGCT TCTGGCAACC ATTCTAGTTT CTGTTTCTTT TCTTTTTTTT TCTTTTGAGA   68040
TGGAGTCTCT GTCGCCCAGG CTGGAGTGTA GTGGCATGAT CTCGGCTCGC TGCAACTTCT   68100
GCCTGCGGGT TCAAGCAGTT CTCCTCCCTC AGCCTCCTGA GTAGCTGGGA CTACAGGGGT   68160
GCACCACCAT GCCTGGCTAA TTTTTTTTTT TTTTTTTTTT TTTGTATTTT TAGTAGAGAC   68220
GGGGGTTTCA CCATGTTGGC CAGGCTGGTC TCGAACTCCT GACCTCAGGT GTTCTGCCTG   68280
CCTCAGCCTC CCAAAGTGCT GGGATTACAG GCTTGAGCCA CTGTACCCGG CCTCTAGTTT   68340
ATGTTTCTAT GAATCAGACT CAGTACCTCA TATAAACGGA ATCATACAGT ATTTGCCTTT   68400
TTTGTGACTG GCTTATTTCA CTTGGCATAA TGGCCTCAAG ATTCATCCAT GTTGTAGCAT   68460

FIG. 6.26

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GGATGAATAT ACAGTTAGGA GTTCCTTTTC TTTTTTAAGT CTTAATCTCC AGTTTATTTC   68520
TGTTTATTTA TTTATTTTAT TATACTTTAA GTTCTGGGAT ACATGTGCAG AACGTGCAGG   68580
CTTGTTACAT AGGTATACAC GTGCCATGGT GGTTGTTGC ACCTGTCAGC CTGTCATCTA   68640
CGTTAGGTAT TTCTCCTAAT GCTATCCCTC CCCTAGCCCC CTACCCGCCG ACAGGCCCCG   68700
GTGTGTGATG TTCCCCTCTC TGTGTCCGTG TGTTCTCATT GTTCAGCTCC CACTTACGAG   68760
TGAGAACATG CGGTGTTTGG TTTTCTGTTC CTGTGTTAGT TTGCTGAGAA TGATGGTTTC   68820
CAGCTTCATC CATGTCTCTG CAAAGGACAT GAGGAGTTTC TTACTTTTAA GGTTGAGTAA   68880
TATTCCACAT TATGTGTATG CCACATTTTC TTTATCCATT CACCTATCTG CAGATGTTTG   68940
AGTTGCTTTC ACTTTTTGGG AATTGTGAAT AATGCTGCAG TGAATGTGGG TGTGCAGGTA   69000
CCTTTTCAAG ATTCTGCTTT TGAGTTTTTT TTGGATACGT ACCTTTTTAT GATGCTTTAA   69060
ATACATATAT GCTATTTTTA AAGGATTCTC AGTTTCTGA CATATGATAG GACTTAGGAA   69120
GTAATCTCAA AGCATCATGT TGACAGGTTG TTAGTTGATG GTGACTGCAG CTAGTTGGAA   69180
AGTCAGAAGA ATCTAGAACT TGTCCATTTA TACTAAAGAA TTTCATAGTA AGTGCAGTAT   69240
TATGAGTGTA ATGTTCAATT GGTAGAAGAG GCTATCTGAG GGGATTTAGT GCATTTCAGT   69300
TATCTGTTGG TGTGAAACGA ATCACCTTGA AACTTAGTCG CTCAAAAATT TTAATGGTGG   69360
CTGGGCATGG TGGCTCACAT CTGGAACTCC AGCACTTTGG GAGGCCGAGG CAGGCAGATT   69420
GCTTGAACCC AGGAGTTTGA GAGCAGCCTG GGCAACGTGG TGAAACCTTG TCTCTACAGA   69480
AAATACCGTG GCAGGCGCCT TTAGCACCAG CTACTTGGGA GGCTAAGGTT GTAGGATCTC   69540
TTGATCCCAG GAGGCAGAGG TTGCAGTGAG CTGGGATCGT GCCACTATAC TCCAGCCTGG   69600
ATAACAGAGC CAGACCCTGT CTCAAAAAAA AATTTTAATG GCTCCATTTA TTATTTCACA   69660
TGATTATGTG AGTTGACTAG GGAATTCTTA CACATCACAC CATGTCAGCT GGGACAGCTG   69720
AAATGTCCAC ATGGCTGGCA GTTGGTACTA GCTGCTAGCT GGAAGTTGAG TTCAAATAGT   69780
CAGCCAGGGG TCTCAGTTAT TTTCCATGAG GTTCTCTCCA TGAGGCCAGC TGGGCTCTTC   69840
ACAGTGTGAT AGCTGGGACT AAGAAGGAGT GTTCCAGAAG AAGGGCTTGT CCTCTTGAGC   69900
CAGTGCTTAT CAGGCCTCTA TGTATATCAT GTGTGCTAAT GTTCCATCAA AGCTAGTCAC   69960
AGGGCCAAGC CAACTCTGTA CAGTGTAGGG ACTGGCTGCA GGAGGGCATG AATTACCAGG   70020
AGGTGTAGTT CTCTAGTTCA TAGGGAGGGC CATCAAGATA GTAGTCTACC ATACTTGTGT   70080
AAAAGAAGGC ATTAATTAAC TATTATTATT ATTATTATTA TTATTTTAGA GACAGGGTCT   70140
TGCTCTGTTG CCCAGGCTGG AGCAGTAGAG TGGGGCAATC ATAGCTCATT GCAGCCTCCA   70200
ACTCCTGGGC TTAAGCAATC CTCCCATCTC AGCCTCCCAA GTAGCTGGGA ATACGGGAGT   70260
GTACTGCCAT GCCCACCTGA AAAAGAAGGC ATATTTTAAA AGCAGACCTT TAGTGTAGAG   70320
GGTTCTTGAA TTTGTTATTT AAAATATTCT GGTAGTTTTT AAACTTAGGA AAGACCCACT   70380
GATTCTTTTA GTGATATGTT TACATTGTTG TTATTTGGCA TAAATTGTGT TAATGCACAG   70440
TAAGATTTCA TGAAGTCATT AAAATTCAGC CACTTGGACT CTAAACCCAA TAAAGATGTA   70500
AAACAGCAGT GCTATGAGAT GCATATTCAG TTTCAAAATA TAGGAAACAC AGAAATTACT   70560
CTGTGCACTT TTAATTTGAA AATACTTTTA AAATGTGTAG TATAATGTAG TGTCTGTCCC   70620
AAAAGAGTAA CATTCATTAT AGTGTTTCTT TACGTTGTTG AAAATTTTAA ATTCACTTAA   70680
CATTAGATTT TTATTAAAGC AAAAATATGT TTTCCTTATT AGCTTACCCT TTTGTAACTC   70740
AGATTAAACC CTTGATTGTT CAAATTAACC TGAAAAAAAT TATTCTTTTG GAGGCCAAAC   70800
TTTTGATTAA GTAGTTGTTT GTCTCTAATT TTTTCAAATT TATGTGTATA AATATAACCT   70860
GTCATCAAAT CAATGCTAAC ATTCTATACA TGTTTTTCAT GATATGAAAA CTATAAAACA   70920
TGAAGTTATT TGAATTTGTG TAGTTTTTAT CATTTTATTT TTACTTTCCA GTGCATCTAT   70980
CCTTTGGGCT CTAAATCACT TAATAACCTA ATTTCTCCTG ATTTGGAAGA ATGTCACACT   71040
CCACATAAGC CTCAGAAAAG GAAGAGCTTA GAAAGCAGCT ATAAGGATTC ACTTCTTTTA   71100
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FIG. 6.27

GCAAATTCCA AAAAGACTAG AAATTATATT GCTATTGACG GTGGAAAAGT TTTGAACAGC   71160
AAACATAATG GAGAAGTATA TGACGAAACC TCGTCAAACT TACCTGATAG TAGTGGTCAA   71220
CAGAATCCAA TTAGGACAGC TGATTCCTTG GAGCGGAATG AGATTTTGGA AGCTGATACT   71280
GTTGACATGG CTACTACAAA AGATCCTGCT ACAGTTGATG TCTCTGGAAC TGGCAGACCT   71340
TCCCCTCAAA ATGAAGGATG TACATCTAAA CTGGAAATGC CACTGGAGAG CAAATGTACA   71400
TCATTTCCCC AGGCTTTATG TGTCCAGTGG AAAAATGCTT ATGCTCTCTG TTGGTTAGAC   71460
TGTATCCTGT CAGCTTTGGT GCACTCGGAA GAGTTAAAGA ACACCGTGAC TGGACTGTGC   71520
TCGAAGGAGG AATCTATATT CTGGCGGTTG CTTACAAAAT ATAATCAAGC AAATACACTT   71580
CTATATACCA GTCAATTGAG TGGTGTTAAA GGTTGGTACT AATATTTTAT TTTTATTTAC   71640
TTATTTATTC ATCTGGAGTC AGGGTCTCAT TCTGTCACCC AGGCTGGAGT GCAGTGGCAT   71700
GATCATGTCT CCTTGCAGCC TTGACTTCCC TGGCTCAGGT GGGCCTCCCA CCTCAGTCTC   71760
CCAAGTAGCT GGAACTACAG TCGTGCACCA CCATAGCCAG CTAAGATAGT GAGATGGTGG   71820
CCCCACTGTC TTGCCCAGGC TGGACTCGAT TTCCTGGGTG CAAGCACCCT TCCCGCCTCA   71880
GCCTCCCAAA GTGCTGGGAT TACAGGCATG AGTCACCATT CCAGCCTACT TGTCTTTAAT   71940
TCTTAAAAAT ATTAATGTTG AGTTTTGTCT CCCAGCATGT GGGAAAGATG TCATCCATTG   72000
CTTCTGTTTC CTGGAGGCCT GGGAGCAAGG AGCCCAGGAA CAGTATCACG AAGCTTGAGA   72060
TAATACCAGT TACATTATCC TGACTGCCCA AAAGGCAGTT TTTTTGTTTT TTTTTTTTAT   72120
ACTTTAAGTT CTGGGGTACA TGTGCAGAAC GTGCAGTTTT GTTACATAGG TATACGTGTG   72180
CCATGGTGGT TTGTTGCACC CATCAACCCG TCACCTATAT TAGGTATTTC TCCTAATGCT   72240
GTCCTTCCCC AACCCCTCCA TTCCCCATCA GGCCCCAGTG TGTGATGTTC CCCTCCCTGT   72300
GTCCATGTGT TCTCATTGTT CAACTGTCAC TTATGAGTGA GAATATATGG TGTTTGGTTT   72360
TTTGTTCTTG TGTTAGTTTG CTGAGAATGA TGGTTTCCAG CTTTATCCAT GTCCCTGCAA   72420
AGGACATGAA CTCATCCTTT TTTATGGCTG CATAGTATTC TATGGTGTAT ATGTGCCACA   72480
TTTTCTTTAT CCAGTCTATC ATTGATGGGC ATTTGGGTTG GTTCCAAGTC TTTGCTATTG   72540
TGATTTTTTT TTTTTTTTTT TTTTTTTTAA GACAGAGCCT CACTCTGTTG CCCAGGCTGG   72600
AGTGCGATGG CATGATCTCA GCTCACTGCA ACCTCCGCCT CTCAGGTTCA AGCAATTCTT   72660
CTGCCTCAGC CTCCCAAGTA GCTGGGACTA CAGGCGCCCA CCACCAGGCC CAGCTAATTT   72720
TTGTATTTTT AGTAGAGACA GGGTTTCACC ATGTTGGTCA GGCTGGTCTT GAACTCCAGA   72780
CCTCATGATC TGCCTGCCTT GGCCTCCCAA AGTGCTGAAA TTACAGGTGT GAGCCACCAT   72840
ACCTGGCCTA GGCAGTCTTT TTCAAAACTC TAAGACTGTG CTTGTGTCTC AGGGTGTCAG   72900
GATAATAGTG GTTAGTTTTA AGTGTTTAAA CTACTGAAAA GCAGAATGAA GAAGTGAGTA   72960
AAAATCACCC ATAATCACAC AACCTCCTAA GATCTCTTGG CACAATAAGG GATATGTTTT   73020
TCATTTTATT CTCTGTAAAA TAGGATACTT ATGAACCCAC CTCCCAACAC AGGAAGAATT   73080
AAAACATTCC CAATAACTTA CATTTACCTA TGCGTTTCCT CCCATCCCAT TCTCTACCTC   73140
CCCCCCATAA GTAATCATTA TCTGAAATGT GTTTCATCAT TCCATCTTTT CTTAGTTTTT   73200
CTTACATGTG TTTATCTAAA CAGTATACAG TAGTCTCCCC TTATTGTAGT TGTACTTTTC   73260
TTGGTTTCAT TTAACCCGAG GTCTGAAAGT AGATGAGTAT AGTACAGTAA TATATTTTGA   73320
GAGAGAGGGA GACCACATTC ACATAACTTT CATTACAGCA TATTGTTATA ATTGTTGTAT   73380
TTTATTATTA GTTTTAATCT TACTATGCCT AATTATAAAA CTTGATCATA GGTATGTAGT   73440
TATAGGAAAA AGCATAAATAT ATAAAATGTT TAGTTACTAT CCAAGGTTTT AGGCATCCAC   73500
TGGGGTCTTG GAAGGTATCC CTCTCAGATA ATGGGGGATG GATGGTACTG AACCCTGTAT   73560
ATACAATGTT TTTCCCTATA CATACATAAT TATGATCAAG TTTAATTAAG AGTAAATTAA   73620
ATGTGGGCCA GGTGCAGTGG CTCACATCTG TAATCCCAGC ACTTTAGGAA GCTGAAGCGG   73680
GCAGATCTCA TGAGGTCAAG AGTTCGAGAC CAGCCTGGCC AACATGGTGA AACCCCATCT   73740

FIG. 6.28

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CTACTAAAAA ATACAAAAAT TGGCTGGCTA TGGTGGCACA CGCCTGTAGT CACAGCTACT   73800
CTGGGAGGTT GAGGCAGGAG AATTGCTTGA ACCCAGGAGG TGGAAGTTGA ACAATCACTT   73860
GAACCTGGGA TCACGCCACT GCACTCCAAC CTGCCTGGGT GATAGAATGA GACTCTGTCT   73920
CAAAAAAAAA AAAAAAAAAA AAAAAGTAAA GTAAATGTGG CTCAACATGT TGCTGTCAGT   73980
TGGAACATTT GTTTCTGATC GTGTCTTCCA CCCACAAATT GAATGCTTTT TCCATCTTAA   74040
CACTTATCAG GCACTGTGGC CATAACTTGA GCAGTTGAGA TGCAACAGCA AAATTAGCAC   74100
AAATTTCTTT TTCTTTCTTC GCAGTTTCAT GGATAAGAGA TTTGTTCTTA GATCTCAGCA   74160
ACCTCAGCAT ATGATTTTTT TCTTTAAGTT GAGAACTTTG ACCTTTTTAC TTAGAGAAGC   74220
ATTTTACAGC TTCTCTTTGG CATATCTGAA TTGCCAGCAT TACTATGCTC GTGCTTTGGG   74280
GCCATTATTA AGTCAAATAA GGGTTGCTTG AACACAAGCA CTGCAATACC ATGGCAATAG   74340
ATCGCATCAC CAAGATGGCT GCTAAGTGAA CCACAGGCAG GAGTGTAGAC AGCATGGACA   74400
CATTAGACGA AGGGAAGATT CACGTTGCCA GTGGAACACA GCAGGACAGC AAGAGAGTTC   74460
ATGATGCTAC TCAGAATGGC ATGAAATTTA AAGCTTATAA ATTGTTTCTG GAATTTTCCG   74520
CTTAATATTT TCAGACCACG GTTGAGTTCA GGTAACTGAA ACCATAGGAA GCAAACACG    74580
GATGAAGAGG GACCACTTCG TATTGCCTAA TTTAGTTTGT TTTGATCTTC TGGGACCTTT   74640
TTTTCTTGTT GTAAAAATTT ATGGGGCTGT TTATAGTTGT GGCTCATTGA TTTTTCATTG   74700
CTACATAATA CTTCCATTTT GTAAATATAA CAGAATATTC ATCTACCTGT CAGTGGACAG   74760
TGGGGTTTTT TTGCCATTAT AAATGCTGCT GCTGTGACCA TTTGGGGGGC AAGTCTCCTG   74820
GGGCACAGTA TGAGTTTCCC TTCTGTATAA CAAAGGAATG GAAAATTATA GACTTTCGTG   74880
TCCAAATTTA CAAGATAATG ACAATTGTTT TCCAAAGTGG TTGTACCAAG CAATTCTCCC   74940
ATTAATAGTG TATATAAGAG GTCTTCCTGA TCCATATATT CTTCTTGGTT TATTTTCACA   75000
CTTTTGAGAT TTTTGCTATT TGAGTGGTAT AAAATGGTCT GTGATCTTGA TTTGCCGTTT   75060
CCACATTTTG AAGAGGTTGT CGGCTCTATG TGTATATATT GCTCATATTT GTTCCCTCTT   75120
CTGTGAAATG CCTTTTGTAT CTTATCCCTA TTTGTTCTGT TCTGTTGATT GTCACGTTTT   75180
AATTGATTTG TATGAGTTTG TTCCTTGTAT CATTGTTGCT AGAGTTACAT CAGATGTGTT   75240
GCTGAATCTG CTCCCAGTTT GCAGCTTGTG TTTTTACTTT TTAAAAACTG TCTTGATTTA   75300
TAGGGAAGTC TTTATCTTTT CATTTGGAGC TAGTAATGTT TGTGGCTTTT TAAAGAAATT   75360
ATTACTATTC CCAAGGTCAG AAAATCATTC ACCTATATTT TAACTGAAAA GTTATAAAGT   75420
TTTGCTTTTG ACATTGAAAT TTCTCATTCA GTTGGAATTC ATATTGATGT GTGGTATGAG   75480
GTAAGGATCC ATTTTTTTCC CATTTGCATA GCCAGTTTTT GTAGCTCCAC TTTATTTTCT   75540
CACTTGATCT GCCATGCCAC CTCTAGCATG TATCAACATA TCATGTATGT GTGCAGCTGT   75600
TCCTTAACTC TCAATTTTAT TCTCTTGGTT ACTTTGTCTA ACCCAGCACT CATACTTTTT   75660
AAATTATTAT GGCTACCTTG TAGGGCAAGA ATCCTCACTT TTATTCAACT TCTTTTGAAG   75720
TGTCTTGATG CATATTTTTT CTGATCTTAC TTGGCCATAT ATATTTTGGG GACAGATGTG   75780
ACATCATACC AAGCTTTCTT TGCTTGACAT TGTAGATATT TTCTTATTCA TTAATGTGCT   75840
AAAAATTTTG AGTTTGGTCA TACAGTCTTT TATATGGATC TTATACATCG TTTCCCTCTT   75900
GTTAACCATT CAGGCTGTTA CTAGTTTTTG CTGTTGTGAA TTAACACCAG GACAAATATC   75960
CATATATCTT TTGAATTAAT TACTGACTAG TTTCCTAGGA AAGATATTAG AATATGAATA   76020
TTAAAGGTCT TGCTGAATAC AGTTTTCAGA ATGGTTGTAC CAATATATAA TTCCATTTTC   76080
ATTATGTAGA AAAAATACCT CAGTGTTTTC TAACCACCTT TGGTTAGAAC ATTCAAGACG   76140
TTATGGTTTT GTTAGGTAAG AAATATTTTG TTTCAGTGTA GGTTTTCTTT GAGACTGAAC   76200
TTTTTTGTGT GTGTCAGTCA TTTACAGTTT TTTGCAATTT TTAAAATTCA GTTTCTCACA   76260
AGCATTTTGC CTTTGACTTT TCTTCTATTT CTGCTTTCTC TAATTACAGA AACCCCAGTG   76320
TTAAGTAGGT GACAGTTCAG TTGTTTGCTG CAGAAGAGCA GCAGTTCAAT ATTGGAATTA   76380
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FIG. 6.29

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ACTTTAATTT TATGTTTTTA ATCTGTTACT AATTTTTTAC AGAATAATTG TAGTTTTTAT    76440
AATCTGGTTA ATTATATGTT TGAGCTGCAT TACTTTGCAA TGTAAGTTTT TTTTTTTGGC    76500
ATGGTCAAAT AACAAAAATT CTGGTTAATG CTTATTTCAT ATTACAGGAG AATCCAGATA    76560
TTTCATTAGG GAAACATATA AGCAGAGTGT GATCAGGCTG TATGAATTAT TTATAAGAGA    76620
TGTGAGTGAA AAGATCTATT TGTAGCTTAA GAGTAAGTAG AGTCAGATGC ATGTAGAGTC    76680
TTTTATTCAA AATAATTTTC TTATTAATCT TGGATAGTTT CTTGTCACAG TAATTCCATT    76740
TTGAAGATAA TAAATATTAC CATAAAGAAG TGATCAAAAA CATAGATATG TGTGCCCAAA    76800
GGTATTTATC ACAATAGTAT TTATAATAGT GAAAAAAGAA ACAACTAAAA TGTCTGGCAA    76860
TAGGAGAATG ATTAATAAAG CGATGTTTCA GCTGAATATA GTGGCATGCG CCTGTAAGCC    76920
CAGCTACTCA GGAGGTTGAG GCTGCAAGAT GGCTTGAGCC CAGGAGTTAA TGACCAGCCC    76980
AGGCAACATA GCAAGACCCT GTCTCCAAAC ACACAAACAC ACACACAAGT GCTATGTTTC    77040
AGTCACTGTA TAATAACTAG CCAGATTTTT TGTTGTTGTT GTTTTGTTTT TGTTTTTGTT    77100
TTTTGAGAGA GCATCTCACT TGCCCAGGCT GGAGTGCAGT AGTACAATCA CAGCTCACTG    77160
CAGCTTGTAG AACCCTAACC CTCCTGGGCT CAAATGATCC TCCCACCTCA GCCTCCTGAG    77220
TAGCTGGGAC TACGGGTGGG TACCACCATA CCCAGCTTTT TTTCTAAGAG ATAGGGGTTT    77280
CACTATGTTG CCCAGGCTGG TCAGTTTTTA ATGAAGCACA TTTGTGTAGA CAAAGCAGGA    77340
TGTGGAACCG GATAAACACT ATGTTGCCAC TGAAGACCCC TTCAAACCCC TCAAAAATGA    77400
CATAGAAGGG AAATATGAGA TATTAGTTTG GGAAATAATT GTAACTTTAT TAAGACTCCT    77460
TATAAATTTA TCTGTTCCTA TGACCTGGCT AAGTTCAATA AAAGTTACAC AGAGTGGAAT    77520
AAATGGTTAG ACATCATTTG TAGTATAAGT AATTGCACAT AAGGAGGTAA CTTTAGCTGT    77580
TTTAGAGATA GACATAGTAT CTGAAAGGTT AGTTATTTTA CTAGACCTGT GATTATTTGG    77640
GTGAGAAAGG CTTTCACTGA GATTTTACCC ATTCAGTAAG TACTAATGAT ATTGTGCTGA    77700
TAGCATATAT TAAGGGAATA TATGGTATAC CACAGAGAAA GAATTAAGGA AATTTTGTGT    77760
TTTGCTTTTT GTCTGTTTGC AAAACTTACT GACTCAGCTT TCATTCTTGG GAATGTGTCA    77820
GTTTTCTGTG GGAAGATATA CATTGATGAG GAATTGATAA TGTTCTCTGT ATTTTCTTAG    77880
ATGGAGATTG TAAAAAACTT ACCTCAGAAA TATTTGCAGA GATAGAGACC TGTCTGAATG    77940
AAGTTAGAGA TGAAATTTTT ATTAGCCTTC AGCCCCAGCT TAGATGCACA TTAGGTAAGT    78000
AATTGGTAAA ACTTACTTGT ATTATACTCA TCTACCTATT AGAAATATGT ACCTCATAAG    78060
GAAATATAAT ACTGTTTGAT TACCTTGGAT GATCATATTC TTGGGAGAGA GAATCTGAGT    78120
AGTTTGACTT AGGAATCTAC CACTGGGTAA GTTATTGTAG GGCAGAGCTG TTCCATATAA    78180
ATATGTAGGC TGGTGTTCCA CCTCTTGAGA GTGGGTGCAG TTCTCAGAAC CAGGAGAATT    78240
TTAGGGGGCA TATCATTAGT TGCTTCTCTA GTACGTTTCC TAGTAGACAG ATCTAGCATT    78300
TTTAACCTCA ATTGTGCATT AAAAAGCACC GAGGGAATTT AAAAGTAAAT GCCAATGCTG    78360
GGGCATTTGA ATTAGGATCT CAGGGATGGG GCTCAGGAAA TCAGTAATTT TTAGAAACCC    78420
CACATGATTG TTATATGTAC CCAGGGTTTA GAATCTCATC TAAACCAACC ATAGTAATTC    78480
TACTTCCCTA CCAGTGATTG GTTTAGGAAT GTCCTTGTGG TAGAGTTTTG GCCAGTGGAT    78540
ATTAAGAGAA ATATGCTGAT GGCCTTTTGG GAAAGCTTCC TCGCCTTTAG AAAGGGCACA    78600
AGGATGGGAC CTCTTTGTTC TCTGTGACTT GGTTTTTGGC CTGTGGGAGT GGCGTGCAGC    78660
AAGTGAGCTA GAGAGTCTGT CCAAACCTTT CTAAATTTTT TTAGTATTGC GAAAAGGAGC    78720
TGCGGGGTTT TTTTGTTTGT TTTTGTTTTG AAAGGGCTTT TTGTTTTATT TTTCTTGTAT    78780
CCTTGTATTA ACTCTTCTAT TAATGTTATA GTAGCAGAAT ATGATACTCC CTATTAGTAA    78840
TAACCCATAT TATGTAAAAT ATCAGTGCCT TCTAGTTTTT CTCTCAATGA GTGACATTTA    78900
ACTTATATTA AAAAATGATA TTTATATTTT ATAATAAAAT CAGTTGTTGC TACTGATTTG    78960
TCTAGCATGT ACAAAAGACA CCATGCTTCC AGATCATTAT AAAATATGAT ATTTTATAAT    79020
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FIG. 6.30

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ATATTTACAA TATATTTATA ACATATTTAT ATACTTAGAA TATATTTTAT AAGGCTGGGC   79080
TTGGTGGCTC ATGCTTGTAA TCCCAGCACT TTGGGAGGCC AAGGCAGGCG TATCACAAGG   79140
TCAAGAGATT GAGACCATCC TGGCCAACAT GGTGAAACCC TGTCTCTACT AAAAATACAA   79200
AAATTAGCCG GGCGTGGTAG TGTGTGCCTG TAGTTCCAGC TACTCGGGAG GCTGAGGCAG   79260
GAGAATCGCT TGAACTTGGG AGACAGAGGT TGCAGTGAGC TGAGATCACG CCATTGCATT   79320
CCAGCCTGGG GACAGAGCGA GACTCCGTCT CAAAAAATGT ATATATATAT ATATATATAT   79380
ATGTGTGTAT GTGTGTGTAT GTGCGTGTGT ATATATATAT ATCGGGAAGC ATGGCATCTT   79440
TTGTACATGC TGGACAGCTT TTGACGTACT TCTTTGACTC ATGCTTCTGC CCCCTAATTT   79500
TCACTTTTTT TCCTACATTT TATTAAAATT AATATATAAT AGTTGTATAT CTGCTTTATT   79560
TTTCATGGAC TTATACATAC ATATTTATTC TGTTCTTATA AAAGTCTGAT TTTTCGTATG   79620
CCAAATTTCT GACATTTCCT CCTCTAGGCC TGAAGAACTG TTGTAATTTA TGCATCAGAT   79680
AGGCCCTCAG ATGGAATGAA TATTCTTTTT TCTTTATATC AAGGTGTAAT TTACATATAG   79740
TAAGACCGTT TTTAAGTGTG TACAGCTCTG TAACCCTCAC TACAATCAAG ATATAGGACT   79800
CTGTCACTCT AAAACTTCTC ACCAGGTTCA TCACCCCCAG CCACTGATCT GTTGAGCGAA   79860
TACTCATTTC AAAGGAGCTT TTTCCGTAAG ATCCCTAGAG TTTAGATGGA AGGGCTTTCG   79920
TGGTGCATTT AGCAGATACC ATTTCCCTTC TAGACTCCCT ACTTCAGTTC CCAGTTGAAT   79980
TAAAGAATGG TTTCTCCCCC AGCCTGAGTC ACTACCCTTC TTATCCCTGA TAATTATTTT   80040
TGGAACAAAG TTACATCTTT TGCTCCACCT CCGCCATGGG CCTGGTTTTC TATGTAACAG   80100
AAGGAATTTT TAAATTATTG TTTTGTGTAA TCATAATAAT TGGGCAAGCA TACAGCTCTT   80160
TTCAGTGCAG GAGGATTCCT CTCTTGTTTT ACTGCCCATT CAAGGATAGG TGCTATATTT   80220
TAGCTGAAGA TCTTACTAAT GAAATGCTCT GTAATCATAT AACTTATTTA AAGATGTGTT   80280
TTGAGCTCTT TCATAATATT TTAATTCATG GAGAACTTTA TGTATTTTAG ACCTGAAGAT   80340
TTTATATTGT CATTATGAAA TGTAAATTGT TTGCTTTTTC AGTTAATATA TAGTTACAAT   80400
AGAATACGGA TTTAAAGGCT GATAATGAAT TACAAAATTG TGCTATATGA CATACTGTTT   80460
ATGCATACAG TGTTGCATAT TTTCATTTCT AGGATATTGA TTTGTATTTC TACTTACAAA   80520
AAAACTTTTT AAAACTTATT TTATGGCTGG GCCCGGTGGC TCACACCTGT AATCCCAGCA   80580
CTTTGGGAGG CCGAGGCGGG TGGATCACCT GAGGTCAGGA GTTCAAGATC AGCCTGGCCA   80640
ACATGGTGAA ACCCTGTCTC TACTAAAAAT ACAAAAAATT AGCCGGACGT GGTGTAGGTG   80700
CCTGTAATCC CAGCTACTCG GGAGGCTGAG GCAGGAAAAT TGCTTGAAAC CAGGAGGCAG   80760
TGGTTGCAGC GAGCAGAGAT TGCGCCATTG CACTCCAACC TGAGCAACAA GTGCGAAACT   80820
CCTTCTCAAA AAGAAACAAA AAAACTTTTT TTAATGTTTT TGTTCAAAAG TAGCAGTGAG   80880
ACTATCCCGC AAAGGTGACT ACTAAAATAG CCTTTGTAAC TACTGATATT TATAGAATAT   80940
GCTTAGGGTT AGGGTATAAC TCGCTTGTAT TATACTCATC TACCATGTAG AAATATGTAC   81000
ATCATAAGGA AATATAATAC TGTTTGATTA CCTTGGATGA TCATATTCTT GGGAGAGAGA   81060
ATCTGAGTAG TTTGACTTAG GAATCTACCA CTGGGTAAGT TATTGTAGGG CAGAGCTGTT   81120
CCATATAAAT ATGTAGGCTG GTGTTCCACC TCTTGAGAGT GGGTGCAGTT CTCAGAACCG   81180
GGAGAATATT TAGGGGACAT ATTGTTAGTT GCTTCTCTAG TACTTTTCCC AGTAGACAGA   81240
TCTAGCATTT TTAACCTCAA TTGTGCATTA AAAAGCACCG AGGGAATTTA AAAGTAAATA   81300
CCAATCATAG GGACATTTGA ATTAGGATCT CAGGGAAGGG GCTCAGGAAA TCAGTAATTT   81360
TTAGAAACCC CACATGATTG TTATTGCTTA GGTAATAACA CCTACTGTCT ACCTTGTGGT   81420
CCTGCCAAGG TGACTGTTCC TGGCCATGTT CCAGGCAACT GTAGTTCCAG CTAGGGGGA    81480
GAACTGGACC ATGGAAGTGA GGCTCTGTCC AGGGTAGGGG AAGGGATGGA AGGTGACTGT   81540
TCCTGGCCAT GTTCCAGGCA ACTGTAGTTC CAGGCTAGGG GGAGAACTGG ACCATGGAAG   81600
TGAGGCTCTG TGCAGGGTAG GGGAAGGGAT GGAAGGACTC AGTCTCTTGG GCCAAATCGG   81660
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FIG. 6.31

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TAAGGCAGCA TCTAAGCTCC TCTGAGAATA GGAAGGAGAG CAACCAATTG GAAAAAGAAT   81720
GGGAAACATG TAGATTCTCC TGCTTACCTT ACTTTCCAGT CTCAAAGCTG GAAGCCAGCA   81780
TTCACTGTTC AGTTATTTTC AATGACAACA AGATTCAAAT CTTCAGTTGT AAAGTTGTTA   81840
AAGGAAAGGA TTAGACTGAA AAGTTAAGAA GAACGGTAGA TGAAGAGTCC AAAGAGTTGA   81900
GGCTGGTCAT TTAACCATTG TGTGGCCACG CCCTCTCCAC AGGTGGAACA AGATGATCAG   81960
AATAGAAATG GCCAATTCTG ATGTGTTTCT ACAGTGTTTC ACTGATTACA TTTTTTAACA   82020
TCTGTAGCAA ACCATTTCCA TAATTTTTTT TTTTTTTTTT AGAGACGAGG TCTCGCTCTG   82080
TCACCCAGGC TGGTATGCAG CGGCATGATC ATAGCTCACT GCAGCCTCAA ATTCCTGGGC   82140
TCAAATGAGC CTCCTGCCTT AGCCTCCTAA GTAGCTTGGA CTACAGGTGT GTAGCACCAC   82200
TCTCAGCTAA TTTATTTCAT TTTATTTTTT GTAGAGATAA TGCCTCGCTA TATTGGCCAG   82260
GATGGTCTCA AACGTTCATA GAAACTGGTT TTAGGTTCCT AGAGGCTGGC AGCAATTCTC   82320
AGAGGTAACG CAAGCAGTCT TCCTGCCTTG GCCTCCCAGT GTGCTGGGAT TACAAGGTGT   82380
GAGCCACCAC ACCTCATCAA TTTTTGTTTT AATATACTCT AAGGCTTATC ATAGTTCCGA   82440
GATCTTTTTT TTTTTCCTGA GAAATCTAGA AAGATGGAAG ACAGTATGGG TCTTTTGTGG   82500
ATTTTTTGTC CTAAGAAATT TTCATAAATG TCTGCCAAGG AAAAGGAAAG AGATCAAAGT   82560
GGTAATTAAA TCTTTAGGAT GGACATTTTT AGAAAAATGC TTTATAAACT TCCCCTCTCC   82620
CAACTCTGAG TGACTTATTG TGTCATACTG TATTAACACA TATTCATGCT GTAAATATAG   82680
TAAGAAAAGA CAATAGTTCA CAATTTTGGT TTAGTTTTTG CCATTATTGA TTATGAGCAG   82740
TAATTCTTCC TTTTCTTTTT GAAGGTGATA TGGAAAGCCC TGTGTTTGCA TTTCCCCTGC   82800
TCTTAAAACT AGAAACCCAC ATTGAAAAGC TCTTCCTATA TTCTTTTTCT TGGGACTTTG   82860
AATGTTCGCA GTGTGGACAC CAATATCAAA ACAGGTTAGT TTCTTTTGTT TTTTAAAATG   82920
GGTTCTTCTA GTTTCTCCAC CACTAAGGTT AAGAGAACAA TTTGAGCACC AGACACTACA   82980
GTTTGCTTGC TTCTTTAAAC TGGAAGGGTC AAAACCTCAT CGTTTGATAG ACTGCTAGTA   83040
GGATATTTCC TAAGGAGTTC TTCAGTGGGA AATAGGGACG ATGAGAGGAA TAATACACCT   83100
CCCTTCTCCA GAGTCCTTGC TGAGTAGAAT ACCTCTCAGA ATGCCATGAA ACTGTAGGCA   83160
TTTTTGTTTA TTCCTCTATT AGAAATGAGG GGTTTGCTT GTTTACTTTA GGTTTCTAAC    83220
ATTATAGACA CTAGTTTTAG GCTCTTGGAG GCTAGCAGCA ATTCTCAGAG GTAATGCAAG   83280
CTTCCCCATT TCTTCCCGTA GTCCTGTGAA AGACCAGCCA CCTCCAGAAG CCTACACATG   83340
AGTCTTCTCA GCCATACTTT CTGCTTTTCC TAATGCCTCT CAGCAGCGTA TTAGAAAGGC   83400
CATGATCGAT GTACCTGTTA CCTTCAGGCT TTGCATAAGG TGTATATGAA ACATAATGAA   83460
TTTCGTGTTT AGGCTCAGGT CCCATCCCCA GGTTACCTCT TTATCTTGGA GACACTTCTG   83520
GTCCCATACA TTTCAGATAA GAGATATTCA ACCTGTACCC ACCACGTAAG GAGAGGAATA   83580
GGTTTTAGAA GAGGAGTCAG GGAGGCAAGG TATTCCCAGA GGGATATTCT CACTTGGTCC   83640
ATACCTGAGA AAGTTGCTGG CTGGCAGTTA GGAAGATGAC CAGACTGGCT CAATTGTTCG   83700
TGTATTCAAA TTATTACAAT AGAAATAACT CTTTCCACCC CCCCCCGCCC TTTTTTTTTT   83760
TTTGAGTTGG AGTCTCGCTC CCGTCACACA GGCTGGAGTG CAGCAGCGTG ATCCCGGCTC   83820
ACTGCAGCCT CCACCTCCTG GGTTAAAGCG ATTCTCCTTC CTCAGCTTCC TGAGTAGCTG   83880
GGATTACAGG TGTGTGCCAC CACGCCCGGC TGATTTTTGT ATTTTTAGTA GAGACAGGGT   83940
TTTGCCATGT TGGCCAGGCT GGTCTTGAAC TCCTGACCTC AGGTGATCCA GCCACCTGAG   84000
CCTCCCACAG TGCTGGGATT ACAGGTGTGA GCCACCATGC CTAGCCACAC TTTTCTTTAG   84060
CTTAAGTGCT TAAGTTAGAA AACTTGAAGT CTCTCTAAGT TACTCAAGTA AAATGTGAGA   84120
TAAAAATATT ACTTTTGAAG GCCGGGCACA GTGGCTCACA TCTGTAATCC CAGCACTTTG   84180
GTAGGCCGAG GCGGGTGGAT CACGAGGTCA GGAGTTTGAG ACCAGCCTGG CCAACATGGT   84240
GAAACGCTGT CTCTACTGAA AATACAAAAA TTAGCCGGGC ATGATGGCGG ACACCTGTAG   84300
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FIG. 6.32

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TCCCAGCTAC TCGGGAGGCT GAGGCAGGAG AATAACTTGA AACCCGAAGG TGGAGGTTGC    84360
AGTGAGCTGA GATTGCACCA CTGCACTCCA GCCTGGTCAA CAAGAATGAC ACTCCGTCTC    84420
AAAAAAAATT AAAAAAAATT ACTTAGATAT TCATTATCTA AATATGAAAT CCTTTTTAGG    84480
TATTTAAGGA GTAGTCAAGG AGAGTTCAGT CTGGGAGGAT GCTCCAGGGA ATGCAGGCAA    84540
CAAAGGTTTT GTTTTTTTTT TAACTGGTTA ACTCAGATCT ACTAGAACAG GGTAAGGGAG    84600
GCCACAGAGT AGACACCATG AGCAAAGCTA ACCCTCCTGA GTTGAAAAAA TTATGGACGA    84660
GAAGTTATCA TTGAAATTAA CTGTTGGCAG ACATATCCAA AGAATATCGC AAGGATTTGG    84720
TCCCTTTATG CATCCTGAGA CAGATGAATG TGTGGAATGG CAGCTGGTGG GCAACAGAGC    84780
GATATTGGCA TGGTGGTGAT ACAGGGAAAT AGTTTCATCG TGTTAAAAGC CATGGAACAA    84840
AGATACATAA TGGCTGCTCT GCAGAAAAAT CCACGTCCCC TCTCCAAAGG GCCTGTTTTA    84900
CTCTGATGTA AAAATTGGGT CAGATAAATT TTCATATTAA GCTTTTTGTT GAGTAAACTT    84960
TTGTAATAGT CCCCAAAACT CCCACTAGAA CAGGGTGAGA ATTAACGTTT TATTCATACC    85020
TAGGACTTAA ATAATTTAGT GTAAGCAAGT GAGTATGAGA ACACATCTGT TTCCAGTCTT    85080
CTATCATTGC TTTATATAAA TTCTCTGGTT TTCTCCTCAC AGTAACTCAG TGAGGAAGAT    85140
CCTAGTGTCC TCATTTGGCA CGTATGGATA TGACAGCTTG AAAGGGGTTA GATTGATTCC    85200
CAAGATGACA CACTGTAAGT GGCAGAGTCA GGAGACACAC TTAGGCTCTT CTGGCCTCTA    85260
AGACTTTCTT GCTCACTGTG GTATACTCCT TAATCACTAC CTGGGTTTTA AATAATATAA    85320
ATAACCTTGC TGATTAAAAT CAGCTTAATT GTAGCTTCTC TGGAATCCAT ATCTTAGTTG    85380
TTTGACAGTT TTCGGTTGAG TGTCTTCTGT GTGTTAGGAA CTCAGGCACT GGAAATAGTG    85440
TATCTTTGCC AAATTTACTA ATTAGGTAGA GAGATAAATAC ACGAACACAT AATAGAGGTC    85500
CAGTGACTTC GTAATTAATC TGATCTTTGG GCTGCTTAAC GTTAGCTTTG AATGCAAGAT    85560
GTTAAATGCG TTTTAGAGAT ATATAGCACA AACTGTGAGA GCTCAAGGGA GGGAAGCCAC    85620
TAGCCGCTTT TGTTTGCTTT TTTGTTTTTT AAAAATAATC TTACTTTGTT CTAAAAATAA    85680
AAGTAGTTAT AGAGGGAAAG CTAAAATGAA GTGACGTTTT CTTAAATATG TTTTAATATG    85740
TCATAACTTA AAACTTATTT CCACTTAATC TGAAGGAGAA CTGTCCAGCA AATTCCTTTG    85800
TTTTTGTGAA GCTGTTTTTA GTGCCAGCAT AAGGGCTTTT TACTCAACTT GGAAAGTGTA    85860
ACCCAGAGTC AGTTAAAAAC ATAGTCTTCA GAGGCAGATC TCAGGTCTGT TATTTATCAC    85920
TGTACTCTAT GTGTCACTTT CCCCATCTGT AAAATGGGGA TAAGAATAGC ACCTGCCTCT    85980
GAGAGTTGTT TGGAAGATGA GTGTCCAGTG CCATGCCCTT TGCACATAGT TTAAGTGTTC    86040
AGAAATGTCA GATGTCATGT GGAGAATTAA CACTTACTTG CTGAGACAGT CTCCTTTTTA    86100
TAAACTAAAC AGTAGGAGCC TTTACATAAC AATTATCTTT GAAAATTTAA GAATTTAGCA    86160
GAAATCAGTG CATTTGTTGA TATCTTTATG TTGCTTTGCT TTTAAAATGT TAACCTCCCT    86220
GACTACTGAT GTTTTTAACA GACAGTGCTT CCTCACAAGA TTTATAAGTA TTTGCTATTG    86280
TTTAGAAAGG AAGCTTGTAT CTCTTAAGTA GCTGCTCTTT AAATTACAAA TATTTTTATT    86340
AAAGTGGATG CAGTTGAGGT TTAGTGTACA TCTTTAAAGG TCATCTTTTT AGATGGCGTT    86400
GCTCTCAAGT ATTCAGACTA AAGTGCAAAT TTAGAACTTG TGTAACCTGT GAAAACAAAA    86460
TTTGTTCACA ATTAATGCTG TGTGTGTGTG TGTTTTTTTT TTAAGGATTA AAAAAAGTTA    86520
AGTTGTATGT ATTCCTGATT TTATGTTTGG AAACATCCCC TTTTCATTTT TGGTTGTCTG    86580
TAATGGCTAG CCAGTTTGAG TTATTTGAGT AAGGGGTGAG CTCTTAATAA ATTTGACAAC    86640
CTTAGAACAG TGGTTCTTCA CTAAGGGCTA TTTTTTCCCC CTTGGGACAT TTGGCAACAT    86700
CTACAGACAA CTGGATGCCG TTACTGGCAT CTGGTGAGGA GAGGCCAGGG ATGATGCTTA    86760
ACATCCTACA GTGCACAGGA CAGTGCTTCA CAGCAAAGAC TCTCTGGTGA AAAATGCAGT    86820
GATACCATTG AGGAACCCTG TCTTTTTTTC TTGCTTCATC TCATAGTTGA AAGATATGGG    86880
AAATTAACAT GGAGCATCTT CACAGAGCTT CTTTACTAGA GGTAGGGAGG AACATTGCCA    86940
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FIG. 6.33

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TATTAACATG ATTTGGGGAA ATAAGAAAGT ATGAATCACG AAAAAGGGGA GGAATACTTT   87000
TAGACATTGG TTTAAATTAA TGTAAATGCA TTTAACGTTA ATGAATTTGT TATGTCATTT   87060
TTTTATAGGC ATATGAAGAG TCTGGTCACC TTTACAAATG TCATCCCTGA GTGGCACCCA   87120
CTTAATGCTG CCCATTTTGG TCCATGTAAC AATTGCAACA GTAAATCACA AATAAGAAAA   87180
ATGGTATTAG AAAAGTGAGT TAAAATTGTC TTATAATTTT TAGTACAAAA TGAAGGTGGA   87240
TTTACATTTT TCTTAATGTG TAGGATTGAA AATGGTGACA ACAACTTACC TTTCTGAAAT   87300
TTGAGTTAAC ATATATTTCT GGGTTGCCAG CTGCCTCGCT CTATCTGGCC AGTGAGCCCA   87360
CTGTCACGGT GAAGCCACTG AAAAGCCAAC TTAGGCTGAC TCTCTGGCCC CACTCTCCTA   87420
GTGTCTTTCC TTCTTTTTGC CTTTTTTCTC CCTTTAAGGA TATCAAGCTT CAGTTTTTCT   87480
CTCCTCTGCC AAGTGTATGG AGTTTCTAGA ATTCTGGGAT TTCCTTAATC AGATTTCAAG   87540
AACTAAGATG ATTCAAAGAT AAGCCACAGG CTCATCTCTC TGAATTTCCA TCTTCTCCTA   87600
GATCTCAGCA TGCTAATTCC TCATCATCTT GAAAGCTATC TAGTGGCCTT GAGCAGATAT   87660
ATTTTCATTG TATTTTGCCA GCTTTTCTGT TTGTCCTCAG TTGGGGAGGT TGGTCAGCAT   87720
TACCTTTTCC AGTATTACCA GAGAACCATC TGTTTAAACT CACAGGTCAG TTCCATCTCA   87780
GGCCGTTTCC CTCTGTCTCA TTAATGCACT CACACATGTA CACAACCTCT CTACTCTTCA   87840
TTTTCAGTCT AATCGTACAT TAAGGAAATG TTTTGAGGTC TAATTTGATG TAATAAAGAA   87900
CCGGGAACAT TAACCTTTAT GCCCTTGAAT GTGCCAGAAA CCCTTCAGAA TCTTTCCTAA   87960
AGGTTTATTC TCATTGAAGT AATAAATCCT CAGTTTATCA GTGCTTACAG GCTCAAAAGG   88020
GAAAAAGGGC AGTAGTCCCC TGTTCCCTCC TCCAGGTATC TACTTTAAAC CTTCAAATTA   88080
AGGTAGTATT TACTTTTACT TTTCAAATTG ATGTGCCTAT TCTACCGTAA TGCAGTCTGT   88140
TCTCCTTTTA TAGTAATTGA GACTAGGGTT CTCACACCAA CACCTGGGCC CCATCTCTGT   88200
TTAGCCTTTC CCTGTCCTTT CAATGCAATT GCGTATTTGG CTAACTCAGT ACTCGGTGTT   88260
TGCATTGTTA TTAATATACA TGTGTTATTC CCTCTTCAGC CAAGCAGTAT ATATAGTTAG   88320
GTTTCACTTT TACAATTCTT ATTTTTCCGG GAATTGTTAT TTGCCTTGTT TTCATTTGTT   88380
TTATTATGTA CTGTGAGTTT TTGCCAAATA CTTTAAAGAC TTATTAATAA ATTTTCAATA   88440
CTCAGATGCT TCACAGTTTT TTACTCTGTT CCTCTCCCCT TTTTTTCCTG GAACTCTTTC   88500
CTGCCACCTT TCACTCTTTG CTGCAGTCTG CGCTGGTTCC TCTCTGGGCC TGCAGCATAG   88560
GGTGCTCTTT ATTATGTACA CACTTCCAGT CACTATCGTA GTTTTTAGCC CAAGGCCTCA   88620
TCCCCACATT CTATCACATC TGTTGCCCAT AAATATCCAG TCCTTTAGGG GTTCTCTGGG   88680
AAAAATAAGC TCTTCTTTGT CATCAACATA TGCACTCCGT AGTACTCATG TCTTCACTTT   88740
GCCCGTTCTG CTGGGTAAGG TGCCACTTCT CTGTTTGCTT TCTGTCCTCT AAATATTTGA   88800
CTTCTTATTT GCTTATTTTC CTTTCTTTGT CCTTTTGGAC TCATATCTTT TTTGCCCCTC   88860
ACTATTATTT GATAGCATTT GTGTAGGAGG GCGAAGTGGG AAGGAAGAGG AGGTGTCTGT   88920
ATCTGTCTGA AGATTACAGA AGTCTGTAAT CTGTCTTGGC TGCCAGGTGT CAGTTTTGAG   88980
ATGTAAATGT TGATGATGAG GTGAGGAGAA GAGCAGCAGA GCATGGGGTC TGCCATCCTG   89040
CCTTGGACCA TGGCCTGCTT TAGGCTGCTT GGTGTATATG ATTTCATCTA GCTGTTCATA   89100
CCTGCTTTTT CCTGTGCCCC AGCACTGAAC ATAGACTCGT ACCATTGTTT TGTGTAATCT   89160
GTTAATTGGT TGCACTGCAG CATATATATT TTTTAACTAT ACAAATAAGT TGCTTCCCTT   89220
AAAGATTCAT GCTCTGATCT GGAAATGGAT TCATTAGGTA AAAGTCTTTT AATGGAAAAT   89280
GTGTTTTGAG TTCCAGTGGG CCAATTTATG AGCAGAATTT ATAATGTGGG CATTTCCTGT   89340
TTTCTTCAAA AGTAAATTGA ACTAGTGTAT GAAGTTTCAC TTAAATTTTA AATGCCAAGG   89400
TCTTTATATA AGTCCTTTGT GTTTTTTTAA TTTTGAAATT TGTATAACTT GATTTGTTTG   89460
TGTCTAATGG AATTTAGAAA TAAATTTAAT ATAGTTTTTA GGGCTAACCT AAAAGTAATT   89520
GGGTTCATCA TGGTGTCATA TGTAATTAAA ACATATAGAA TCCTAAAAAC TAATTAAGTT   89580
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FIG. 6.34

CCTTGGACAC CTTATCTCAC ATAACCCACA TCTCTAATGT CTCCCCATTG GGAAAAGAGT   89640
CCATTGATAA ATCAGGTGAA TTATGCCTAG CGGGCCCAAA TCTGCTACTT TTCTTTAAGT   89700
TGTTTAGGAG TTACATTCAG ACCATGGTGA CATGGAGCAC CAAGAACTTA GAATCAGATT   89760
TCATTTTACT TGACAAACTC TTGAAAGGTC ACTGCCACAG TCTCTCTTGA GTGCAAGGCT   89820
ATGGCTATGC TTTGTAGCAC AGGGACGCGA TATTTCTCTG CTATCTTTGG GTAGCAGAGG   89880
TTAACACAGC TCCCTTGTGC TTTCTTTCTC TCTTTTCTAT TTTCTTTTCT TTTCCTAAGG   89940
ATAGATCTTT AAATAGGAGG AGTTTAACCC CATGTTAGGT GAATTCAAAT GGATCTTAGC   90000
CTGATGTCTC TTGTTCTCTT TTGGTTCCAG TTTGGTTAAT TCCTTTCATC CAATTTTCCA   90060
GTGGTTGAGG GAGAACCTAA CTTGCTCTCC TCGACTCTGA GCATCATCCT TCACTGACAG   90120
TTCAGGCATT GTGGGTAGGA AGAAGTCTGA GAACAAAACC TAGGGATAAA GTTTAGTAGA   90180
GATGGGGTTT CACCATGTTG GCCAGGTTGG TCTCGAACTC CCGACCTCAG GTAATCCACC   90240
TGCCTTGGCC TCCCAAAGTG AGGCTGGAAA TAAGACATGC TGGAATTGTA AGTAGGACAC   90300
TAGAGTCTAG GGGAATCAAA GAGGAAAATG AACAGAAAAG GGAAGGGGAA GGATATTATT   90360
TGATTGACTC CAAGATGCTA CTGTTTGTAA GTTTTACCAT TTTAAAAATA TGCCATTAAG   90420
AAAGAAATGC TGGCCGGGCA TGGTGGCTTA TGCCTGTAGT CCCAGCACTT TGGGAGGCTG   90480
AAGCGGACAG ATCACCTGAG ACTAGGAATT TGAGACCATC CTGGCCAACG TGGTGAAACC   90540
GCATCTCTAC TAAAAATACA AAAATCAGCT GGATATGGTG GCACATGCCT ATTGTCCCAG   90600
CTACTCAGGA GGCTGAGACA TTAGTACTGC TTGAACTGGG GAGGCAAAGG TTTCAGTGAG   90660
CAGAGATTGT GCCACTGCAC TCCAGCCTGG GCAACAGAGT GAGACTGTCT CAAAAAAAAA   90720
AAAAAAAGA AAGAAATGCT GCTTATTTAA CTGTGTTCTG TCAATGTTAA GGTGTATCCC   90780
GACTTCAGAG ATGTTAACAA ATGGGAAAAA ATTTGGAATT CATTAGGCAT TTGGAACTTA   90840
CAAAGTTTCG GCCGGGCATA GTGGCTCATG CCTGTAATCA CTTTGGGAGG CCAAGGCGGG   90900
TGGATTACCT AAGGTCAGGA GTTCGAGACC AATCTGGCCA ACATGGTGAA ACCCCATCTC   90960
TACTAAAAAT ACAAAAATTA GCTGGGTGTG GTGGCATGCG CCTGTAGTCC CAGCTACTCA   91020
GGAGGCTAAG GCAGGAGAAT CGCTTGAACC CAGGGGGCGG AGGTTGCAGA GAGCTGAGAT   91080
CGTGCCCTGC ACTCCAACTT GGACAACAGA GTGAGACGCC ATCTCAAAAA CAAACAAACC   91140
AAAAAAAAAA AAAAAATTTC ATAGTTACAG AAAGTAGTAT GGAGGCCATA CCGAGATTTT   91200
CGACATGGTA GTAAAACTCT GCATTATGGC TCTGTTCTGC ATCATCTCTG TTCTGCATCG   91260
TTTCACTCCA CATCAGACCC TGGATAGCTT TGGTGTACTG GTCGATCTTG TGGCAGTAAG   91320
GCTAGTGTAA TTAAGAGGAT ATTTTAAAAC TTAACATATA ATTGCTCTAG TTGTTGTCTC   91380
TTTTTTGCTG GTTAAGAAAA TCAAATTTCT ATCCTATCTG AATCTCATAG CAGACTTTGG   91440
AGATTTCTGA CAAGTCATTT CTTACTACCT AGGGGAATGT ACTTGTACTC AGCTAGAGTC   91500
TGAGTATCTT CTACATCCAG GGAATTGGGC TGAGTGTGGA TTTTGGTCTT GGCAGTTTTT   91560
ACTTTTATTA ATTTGCAAAA GAATAGAAGA CTTGGAATGT ACAAGAAGCA TAAAAATGTG   91620
TCAGGTGGTT TTACATGCGT TATTTATCAC GTTAATATGT CTTAAGATAT TTTCCACGTG   91680
TAAACTTATG TAAAGGCAGG AAACTAGTGA GATTTCATAT TCTAGGGATC AAGAGATTGT   91740
TTTAGTAACT AGCCTCAGAA AGTATCTTGA AAGGTATTAT ATAAGGTCAA GGAACTAAAT   91800
ATTAGTAAAG AGTCAGGCCA GGCGTGGTGG CTTATGCCTG TAATCCCAGC ACTTTGGGAG   91860
GCCAAGGCAG GCAGATCACT TGAAGTCAGC AGTTCGAGAC CAGCCTGGCC AACATGGTGA   91920
AACCCTGTCT TTACTAAAAA TAGTAGTGTG TGGTATGGTG GCGCATGCCT GTAATCCAGC   91980
TCCTCAGGAG GCTGTGGTGG GAGAATCACT TGAGCCCAGG AGGCGGAGAT TGCAGTAAGC   92040
TGAGATTGCA CCACTGCACT CCAACCTGGG TGACAGAGCT AGTGTCTGTC TCAAAAAAAG   92100
AAAAAAAAAA AGGTCAGATA GGTGCCTAAA GCCTGTGTGT CTCGCTATGA GAATACATCT   92160
CAAGTTTTAC TGTGGTTCAT TGATTCAGAC ATGTAGTTCA CATTTTAACC TGTCTGAAAT   92220

FIG. 6.35

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GGTAATATGT GAAATTGATG TCATGATATA GTTTAATTGG CAGCATGTTT TCATAGTGGT   92280
ACATTTTATA ATTAGTGAAA TCTTAGATTT GATGAAATAG ATATGATTTT TTAAAGTGGG   92340
AAAGTTTAGT GTTATAGACA GTTTGCAGGA CTTTTTATTT TGTAGGTACT TAAATTTTGA   92400
GGACTTAATT ATTCTCTAAT AAAGTGATTG ACAAGGATTA ATGTATAAAT TATACCTTGT   92460
CAGTCTGAAC AATCTGCAGT TTGGACATTG ATTCAAATTC ATTTAGGCTG AATAAATTTT   92520
GATAAACTAA GTAAGTTTTG ACAGCTATTT AAATATTGGG AAAGGGGATA TTCAACATTT   92580
TTCTTACATC CTGAGAGCTT TGTTAAATTT AGTTATTTGA GACCCATTGG GTTCTATTTT   92640
CTGGTTCAGC ATGTTGCTGT AATGGTAAAA TACAATTTTG AAATTATAGT TGTCTTGAAG   92700
TTAATAATAA ATTGACCAAT ATGTTGTATT TTTTTCTCTA CTTAGTTACA AATTGAACTT   92760
TTCCTAAGTA GAACTTTTAA TTTGACAGGC CCCCTTTGCT TCCTGAGGTA ACTGAAATAG   92820
GCCAAATTAA TGCTTTTTTG AATATCTTAG GTTGTTGCT TTCTTTCACA TGTTACCTAC     92880
CCCACTTAAC AAAAGCAATT AATCTCAGCA CTTGATGCCA AGAAAATTC TAAAAGGTCT      92940
GGATTTTTTC CTTGGATTTT ACAAAGTAGC TACAATGGGA CTTTTAAGAC AAAGCTGCAT   93000
TGCTGCTTAC AGAGCAATTT TTGTTTAATG GTCTGTGTTA GAGTCATACT GCATGATGAC   93060
TTCCAACTGT CTGGGATACC ATTCTGAAAA GGGTTTAGTG TTACATACTT CTTAGAGAGA   93120
GTTCTCCATT TCTAATTAAG GCACACATCT GGAGGTGCTC AAGAAAAATT AGTGCAGTTA   93180
GCCTTGGAAG TGTTATGTGT GACTAGTTCA CTTCAGACAT CTTTTGTATA ATCAGACACA   93240
TGGCATTAAA TTTATTTAAC TTCTCTTGCT TTTCTCTCCC ACAGAGTATC TCCCATATTC   93300
ATGTTGCACT TTGTAGAAGG CTTACCACAG AATGACTTGC AGCACTATGC ATTTCATTTT   93360
GAAGGCTGTC TTTATCAGAT AACTTCTGTA ATTCAGTATC GAGCAAATAA TCATTTTATA   93420
ACATGGATTT TAGATGCTGA TGGTAAGTGT TTAGAGGTTT TCTTTTAAGA TAATTGGCAT   93480
AGAAACTAAA TTCTAGCATG TGGGGACTTT TTGGTTTTTG TTTTATAAAA AAAGACAAAC   93540
TTTGTCCTGA CTCTTTCTCT CTCCATTCTC GCCTTTGCCT TCTGCCCCTC CTCGCATCTA   93600
TTAAAAGTGA TGGTTTTAGT ATCCTGTCTC ATTTTTTCCT TTCCTTACAT CATGTATTAT   93660
AGGTAAACAC ATGCGCATGT GTGTATTTCT CTTTTAGACA AAGGATGAGA TTACTACTGT   93720
TAGCTCAGTT TTTTTTTCCC TACTTAACAT CTTTGCTTTT ATTTTTTAGA CATATTTCTA   93780
AGACTATTAA ACATTAGACT TACGTAGCCC TTCTGTCATT GTGAAATACA TAGTTTACTA   93840
ACAGCTACCA TCAAGATAAA GCCTTTATTT AAATAATTAA ACTTCTTAGT GGAAAGCTAA   93900
GTAAGCACAG TTTATGGATT TTGGGAATTT TTGCCTTGCA TTTGTCTGAT ATGGTAAAAT   93960
ATTGAGTTTG TTTTTCTCAT AATGTTCACT TTGTCTTAGA CAAGATAACT CAATCCCCTT   94020
AAAGGGTTGT ATCAAGCCAT TGATAAGGGC TCACTTTGAT ATAACCATTT TCTGTTATTT   94080
AGACACTCTT TCACACTTCC TATTTTCCTC CTGGGGATGG TTTGAATGGA TGACACAATA   94140
CCATATTATA AAAGCACTTT ACAAACTGTA ACTTATGTTA TAAATGTAAT TATTACCTTA   94200
AGGTTTTACC CTGTTTCAGA TTTGAGTGGA AGTAGTTCTT TACAATACAA AACAACTTAT   94260
TTTAACTTTT TTTGCATTTC AAAGAATGAT CAATCCACTT CAGGTGCAGC ATGGTTTCCA   94320
ACCCTGACAG CATGGAAGAA TCATTTATTT AGCTTCTAAA AATGTGCAGG CTGTACCCTA   94380
GACCAGCCTT GGGGATTAGG CCCAAATATC AATGTTGGGT GTTTTTGGTA TTGGTTTTTG   94440
GCCCGCCTAC CCGCCCTTCC TTCCTTCGTT CCTCTCTCTC ATTCTCTCTC TCTCTCTCTT   94500
TCTCTCTCTC CTTCTTTGCT CCTTCATTCC TTCTCTCTCT CTCTTTTTTT TTTGAGACAG   94560
CATCTCACTA TATTGCCCAG GCTGTTCTCA AACTCCTGGG CTCAAGTGAT CCTCCTGCCT   94620
CAGCTTCCTG AGTAGCTAGG ACTACAGGCA CATGCTATGG CAATACTGTT TTAAACATTG   94680
TTTTCAAGGC TCCCCAGGTG ATTCCAGTGT GGGTCATGTG GTAGAGAACC ACTGACACAG   94740
GCAAACAAAG GATACATAAA GTTGTCTATT TAATGGGTAG GTGCAGGTAG TAGATAAGAG   94800
TGTAGCCACA TAAACCACAT GCTTAGTGAA CGGTTTTGTT TTGTGTGTAT GTGAGGGATT   94860
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FIG. 6.36

AGCATCTCTG AGTATATTTT GTTTTCCCTT TTGAAACTTA TCAGAGAATT CATATGTCTG 94920

TTATGTGACT AATGCTCACA TTAAAAAAG TTATGTGACT TTTTTTAATT CATATGTCTT 94980

TTTAATTCAT TTATTCATTC ATATGTCTGT TATGTGACTA ATGCTCTCAT AAAAAAAGTA 95040

ATGCTCAGTT TACTTTTTTT ATATCAGATC ATATATATAT GTTTTTTTTT TTGAGATGGA 95100

GTTTTGCTCT TGTTGCCCAG GCTGGAGTGT ATTGGCGCAG TCTTGTCTCA CCACCACGTC 95160

TGCCTCCCGG GTTCAAGTGA TTCTCCTGCC TCATCCTCCT GAGTAGCCGG AATACACGCA 95220

GGCGCTACCA TGCCCGGCTA ATTTTGTATT TTTAGTAGAG ACAGGGTTTC TCCATGTTGG 95280

TCAGGTTGGT CTTGAACTCC CAACCTCAGG TGACCCACCC GCCTCGGCCT CCCGAAGTGC 95340

TGGGATTACA GGCATGAGCC ACCGCACCCG GCCATATCTT ATATTTTAAT AAATATTTTA 95400

ATTTGGTCTG TAAATTTTTC TTTTTGGGGA ATGTGTTTTA AGTCTGTGTT GAGTCCTAGA 95460

CATTTGTTGT TCTCAGATAG TCACTAGTGA TACCTTAACA TTAACCAGCC TGTTGGCAAC 95520

TAAATTGGCC TGAAGTGACA ACTAAGGAAA GGTCTCTTTC TCCTTTCTTA ATCTTTGCAT 95580

TCCTTAAGAT TAGTTCTTTG TAGGAAGGCT TTGAAGTCTG GTGGCAAGTA CCCTTTATCC 95640

CTCACAATCT TAAGATAAGG TCTTTCTGAG CATTAAAAAG TGACTGTGGG AGATATGTCA 95700

AATGAGTTTT CTGTGTGTGC TCTGAGAAAT CTTTTTTTCA AAAAAGGATA GATGTACTTG 95760

TATAAGGAAA AGAGAAACTG AGCGCACTTT CAATATTTAA GTAAGTGTCT CTAACATGTT 95820

TTGCAACATA AAATGATGAC CACTGTGTTG GTCATTACTT CTCTACTGCT AAAACAATGT 95880

TTTCTAAAAT AATATACTCC TTAGAAAAAA ATATAGTGCT TTGGGTGTGC ACTGTTGTAA 95940

TCCAAGGAAT AGGAAATGTT TTGTAGTAAG TGCGATGGTG TTTGACATCG TGATTTATTA 96000

ATTTATCACA TTTGGTTTCA TAGAAATAGA GTAAGCTACG TATTTGCTGT GCCGCAATTA 96060

CCATGACATT ACACTTGTAT CTATTTCTGT TTCATAGATG TGTAGATATT GATATATACA 96120

GTGGAAGTAT GGATTGTTTT GATAAGTTTC TAATGAAAGT ACAGATATTT GTTGATTATT 96180

TATTAAGAAA GGTTGTTACT CATCCAAGCC CGTGGTTAGC TTTTCCCAAA TTATCATGTG 96240

GTAGTAAGTA AAATGTAAAG AAATATACCC TCCCTTAACC CCACACCACC TGTTAGCACC 96300

TAGCCACCTT CCTTTACTTC TCAGCCGTAC TTTTTGTATT TTTTTGTTGT AGTGGTAAAA 96360

TATAAATAAC ATAAAATTTA CCATTTTAAC ATTTGTAAGT GTACAATTCA TTGGCATTGA 96420

ATACATTGTG TGCAACCACC ATCACCATCA GGACTTTTTC ATCAACCCAA ACAGAAACTA 96480

CTCATTAAAC AATAACTCCG CATCCTTCCA CCCCAAAGCC CTGGTAACCA CTATTCTACT 96540

TTCTGTCTCT GTGAATCTGT CTATTCTAGA TACCTCATAG AAGTGGAATC GTACATTATT 96600

TGTCCTTTTG TGTCTGGCTT ATTTTACTCA GCATATTTTC AAGATTCATT TGTGTTGTGG 96660

GATGTAGCAG AATGTCATTC CTTTCTAAGG CTGAGTAGCA TTGTATGTAT TATCCATTTA 96720

TCTGTTACGG ACATTTGACT ATTGTGAATA ATGCTGTTGT GAACATTGGT GGACAAGGAA 96780

CTGAAAGTCC CTGCTTTTCA TTCTTTTTGG CATAAACCTA CAAGAGGAAT TGCTGGGTCT 96840

TAACGGTAAT TCTGTGTTTA ATTTTTGGAC GAACTGCCAG ACTGTTCCA CAGCAGTTGT 96900

ACTATTTTAC ATCCCCACCA GCGTTACACA AGGATTCCAA TTTCTCTACA TCCTTGCCAA 96960

CATTTGCTAT TTTCTATTTT TTTTTAATAA TATCCATCCT AATGGGTGTC TTTTTTTTTT 97020

TTTAAAGGAA TGGTTTAAAC AGGTTACCTT CTTACTCCTC ATTCATGCTT TAGTTGACTA 97080

CATAAGGACC CCTCTCCCTA TTGGCACCAT TGAAATTGTT CAGGCAAAAA TAACTGCCAG 97140

CGACACACTG CTTTAAGTAA TGGACTTTTC CCAAGTTTTG TATTAATATT TCAGTATTTG 97200

GTAGTGCATC CTACTGCTAG TTTTTAAACT CTTCCCTTGT CATCTATCAT CTCATTCTCT 97260

CTTGACAAAT GTGAAAATGG AAGCTCAGAA ATAAAACAAG AATTAAAACG AATAGTGATC 97320

CTTCAGGTAA CAAGCTTCAT TTATCATGAA AACATATATG TATGAAACAT TCTGTTTTCT 97380

GATGTTATTG GATAAATTAG GTGATAACCA AATTCTAAGT TCCAAAAATT AAATATACTC 97440

TATCTAAGGA CTTTAACATG GCAGACAATG GTGACAAGGT CAAGAACATG TTTTAGAGTC 97500

FIG. 6.37

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TTCTCCTTTG GTCGGTATTC AATGATACAA CAGTTGAAAA GGCCAGAAGA AAGTTAACCT    97560
AGGATGGTGG TTTTTGAATA TCTAACTTTC ACTTCTTTCC CATCTTCCAG GAAGTTGGCT    97620
GGAATGTGAT GACTTAAAAG GCCCATGTTC TGAAAGGCAC AAGAAATTTG AAGTTCCTGC    97680
TTCAGAGATA CATATTGTTA TTTGGGAAAG AAAAATATCC CAAGTGACAG ATAAAGAAGC    97740
TGCCTGCCTT CCACTTAAAA AGACTAATGA CCAACACGCT CTCAGTAATG AGAAACCAGT    97800
ATCTTTAACA TCGTGTTCTG TGGGTGATGC TGCCTCAGCT GAAACAGCCT CAGTAACTCA    97860
CCCTAAAGAT ATATCAGTTG CCCCTCGTAC TCTTTCACAG GACACAGCTG TAACTCATGG    97920
AGATCATTTA CTTTCAGGTC CAAAAGGTTT GGTTGACAAT ATTTTACCTC TGACACTTGA    97980
AGAAACTATC CAGAAAACAG CCTCAGTTTC ACAGTTAAAT TCTGAAGCTT CCTGTTAGA    98040
AAATAAACCT GTAGCAGAAA ATACAGGAAT TCTCAAAACC AATACTTTGC TATCACAAGA    98100
ATCACTAATG GCTTCTTCAG TATCAGCTCC ATGTAATGAA AAGCTTATTC AAGACCAATT    98160
TGTGGACATA AGTTTTCCAT CCCAAGTTGT AAATACAAAC ATGCAGTCAG TACAGCTGAA    98220
TACAGAAGAT ACTGTAAATA CTAAATCTGT GAATAATACT GATGCTACTG GTCTTATACA    98280
GGGAGTGAAG TCAGTAGAAA TTGAGAAGGA CGCTCAGTTA AAACAATTCC TTACACCAAA    98340
AACTGAACAA TTAAAACCAG AACGTGTCAC ATCTCAGGTA TCTAATTTGA AGAAAAAAGA    98400
AACTACAGCA GATTCTCAAA CCACAACATC TAAGTCATTA CAGAATCAGT CTCTGAAAGA    98460
AAATCAGAAG AAGCCATTTG TGGGAAGTTG GGTTAAAGGC TTAATAAGCA GGGGTGCTTC    98520
TTTTATGCCA CTCTGTGTTT CAGCTCATAA TAGAAACACT ATAACTGATT TACAACCTTC    98580
AGTTAAAGGG GTAAATAATT TTGGTGGCTT TAAAACTAAA GGTATAAACC AGAAGGCCAG    98640
CCACGTATCC AAGAAAGCTC GTAAGAGTGC AAGTAAGCCT CCTCCCATCA GTAAGCCACC    98700
AGCAGGCCCT CCATCGTCTA ATGGCACAGC TGCCCACCCA CATGCTCATG CTGCTTCAGA    98760
AGTTTTGGAA AAGTCTGGAA GCACCTCATG TGGAGCTCAA CTCAACCACA GTTCTTATGG    98820
GAATGGTATT TCTTCAGCAA ACCATGAAGA CTTGGTGGAA GGTCAGATTC ATAAACTTCG    98880
TCTAAAACTT CGTAAAAAGC TAAAGGCAGA AAAGAAGAAA TTAGCTGCTC TTATGTCTTC    98940
CCCGCAAAGC AGAACAGTTC GAAGTGAAAA TCTAGAACAG GTGCCCCAGG ATGGGTCTCC    99000
AAATGATTGT GAATCAATAG AGGACTTGTT AAATGAGCTA CCATATCCAA TTGATATTGC    99060
CAGTGAGTCT GCATGCACCA CTGTTCCTGG TGTTTCCCTG TACAGTAGTC AAACTCATGA    99120
AGAAATTTTA GCGGAATTAT TGTCTCCTAC ACCTGTTTCA ACAGAGCTGT CAGAAAATGG    99180
GGAAGGTGAC TTTAGGTATT TGGGAATGGG AGATAGTCAT ATCCCACCAC CAGTACCAAG    99240
TGAATTCAAT GATGTTTCCC AGAACACACA TCTGAGACAG GACCATAATT ATTGTAGCCC    99300
CACCAAGAAA AATCCATGTG AAGTTCAGCC AGACTCTCTG ACAAATAATG CCTGCGTTAG    99360
AACATTAAAC TTGGAGAGTC CGATGAAGAC TGATATTTTC GATGAGTTTT TTTCCTCCTC    99420
AGCATTAAAT GCTTTAGCAA ATGACACATT AGACCTACCT CATTTCGATG AATATCTGTT    99480
TGAGAATTAT TGAATTAATG CTTGTTAACT TTTTTTCATAT AATATTTATT ATTATTAGAA    99540
GAACTTACAA TGTGTTCAGG TAGTGTTTAT ACACTGGACT TGTGTAATTA CTTGTGTAAT    99600
AACCATGAAC AAAATGCAAG GTTTAACCTT TGGTTCTGCC CATGAAGCAT GTAATCTTTC    99660
TTACACATTA AAATCACTGA ATGTGTTCTC CTTTTTGGTT TCATTTGTT CTTGTGAGAG    99720
TATGAGGATT TCAAAATGTT AAAGATGAAA AGTGGCGTCT AGTTCTGAC AGTTTGTACA    99780
GTTGGATGCA TTACATTTTT AGATTTGAAG TTTTGGTTAT GTTAGTGTTA TGAGTGATCT    99840
TTGTGGTGGT TTTCTTCCCC TGGAAACCTG TTGCTCGTGG CGCTTTGCCC ACGGTGCCCG    99900
AGTTCTTGTC CTGTGTCCAG ATATGCAGAC AAATGAAGGG TGAAGAAGAA GAAGAGGAGC    99960
TTTATTTAGT GTTAGAACAG CTCAGAAGGA GACCCACAGT GAGCAGCTCC CCTGTGTCGG    100020
CGGGCAGGTC GTCCCTCAAG TGTTCAGCTC TCAGCAGAGA AAAGGCCCTG GAGAGGGTGA    100080
CTCCTCTCAG CTCTCAGCAG AGAAGCAGCC CTGGAGAAGG TAGCTTCTGT TCGCAGGCAG    100140
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FIG. 6.38

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ATTGTCCAGA GGTCCTGCTG CTCTCAGACG GGGCCCTGGA GAGGATAGCT TCTATCCATA   100200
GGCAGGTTGT TCTGCCGTCT CTACAGGTCT CTGAAGCTCT TAGCAGAGAG GGTAGCTCCT   100260
CCCTGTTGCT GGTCGTCCCA CCCTCTGCTC AGTTCTGGCT GAGCCTGGGG CATTTTACGG   100320
GCCTCGGGGG AGGAAGTGCA TACTTACTGG CCTGGAAAAG GCACCAGTTC CCACTCCTAC   100380
AGGTGGGACT GGCAGCCTGG CCCTCAGCCT TCAGGCCCTC CCTGTTCATG GCTTCCAGGC   100440
TTACCCCCCT GCTTTGATCT GAGAGCTGGT GCCAATAGCA GGGAGAAGCC AAGCTGCAGA   100500
GGCAAGCACT TCCGAGCCTG CAAAAGCAGG CCCCCAAAAG TGCAGGGATG CCTGAGTCTG   100560
CACCCGCACC CAGGAGGGTG GAGATCTTGC CTGCTCCAAG GCTGCAGCCG GAATGATAGC   100620
AGGCTGACTG GAGCACCTGC CACCATCATT AGTTCAAGAG TTTATGCAGA TTTAAGTTGT   100680
ATACGGTATA TGAATGTGTG ACAGTTTTCC TTATGGTTGT GTGGCCTTCT GTAAGAGCCT   100740
ACGCCTGTTT GTTACACCGG TAGAGTGCTG TGGAATGTAA ACTTTCCCTA TGTCACTTAT   100800
CTCCTTTATC TCTCCATACA GAGGAGGGCA AGAAACCTTG TTACTTGAAC TTTAGTAATG   100860
TTAAGTGATC AATAAATCTA TAAATAAATG ATAGCAGAAA AAAGTTACCT GTTTTTGTGA   100920
TGATGTACAA ACTTTACATG TTATCACAAA TACCATCTTT CTTCCCAAGA CATTTACTTC   100980
TGTAACCAAA GTGGGACACC ATCTAACAGT TCTGTTTTGG GAGAGAGTAA TAACCAGTGC   101040
TTGTGAGGCT TGTTAGATGT TGGTTGTGAT ATATGAGATA GATGTTATTT CATTTAGACC   101100
TCAACATTCC TGTGCGTGAG ATACTTTTAT CACATCTTAC AGATAAGGAG ACTGTACTCA   101160
TTCAGTTGTG GAGCTGAGAT TGAGTAGAGT GGCTATTACA GCAGTTGAGT GCTGAGCTTA   101220
TCAATATATG TTCCACTCCT CAGGCTTCAT TTAAAGTAGG ATGCCCAAAC AGCACCACTG   101280
CCGTAGAGAT TTGAGTTAAC AGCAGTACTT ACTGAGGTTT AAGGCTGGCA GCCAGTGTCC   101340
TTGCAGTAAA ATTATTTGCT AGGGACTCAG TACTTCATAA TCTATTTGTC AGATTTACTC   101400
CTAAGCTTCT GTGTTGTTTT ATTTTTTTTC TGACAAAAGT AGTGCATATT GTCAAGGAAA   101460
AACTAGGAAA ATACCAAAAA AAAAGATTTT TGACCATGCA TTTTAATACT TAGTGACTAC   101520
AAACATTTTC CTATTTTATG CATATAGATT TTAAATAAAC GTGAGATCCT ATTGTATCTG   101580
TTTTAATGGA TAAACATTGT TTCACTGTTT TAAGATTCTG AGGTGATTTA TACTGTCTTG   101640
CCATTGTTAA TTGCAGCAGT TAGCCTTGTT GATAAATTTT TGCATGGATC CAAGTTTTGT   101700
TTTCCAGGAG TGGAGTTGCT TGGTCAAAGG AAATGCACAT TTAAGGTTTT TTGGTGATTG   101760
CATGACTGAC TTCCCTGGGC CCTCGCCAAC ACTAGGTAGT AGTATTGGGA GGAAGGGGGG   101820
AACCAATCCT GGGTGCTCCA AGATTACTAG TGAGCCTGAA CATTTTCTAT AACTATTGTC   101880
CACTTGAGTT GTTGTTTTGT TTTTTTTTTG GTGGAGGCGG GGGTGGGTTT AAGAATTGCT   101940
TATCCTTTGC TTGTACTAAT TATCTTTTCA ACAAATATTT CTAGATTACT GCTAAGGACC   102000
AAGCACTGTT ATCAGCCTGA GATAAGGCAG CACACTAGAA GGAAATCCTT GCTCCTTTTG   102060
AGTTTGCCTT CCAAACATGG AGATCAATAT ATAATGTTAG GTAGTAATAG GAGATACATG   102120
CAGTTGATTC ATGTCATTTG TAGTAGTTAT GGTCAATAAA GTTGCCTTGA ACACTGAATT   102180
AGTATAAACT GAAATACTGT TCCTAGGGGA AATAGGTTCC TGCTAGCCTG TGGTCATGAG   102240
ATTTTTGTCA AACAATCACT ATATAACCTT TTCTGTTTCT GTTTAAAGAC ATGTTATTTG   102300
ATCTATATGG TTGATTCTTT ACATTAACAT GGCCAACAGC ACTGTAACTC AGCCTGAACG   102360
AAGCTTATCT GACACATGGT GTTCTCCATA AGGCACATCA TAGCTTTCTG TGCTTAGGAA   102420
CACTAGACGG CACTTCAGCA CTGCACTTGA GGACGTTTTA AACAGTGAAA TCAACAAAAA   102480
GCACAAAAAA ATGCAACAAT AGGCTGGGCA AGGTGGCTCA CGCCTGTAAT CCCATCACTT   102540
AGGGAGGCCG AGGCGGGCGG ATCACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACG   102600
GTGAAACCCC GTCTCTACTA AAAATACAAA GAATTAGCCG GGCGAGGTGG CAGGCGCCTG   102660
TAGTCCCAGC TACTCGGGAG GCTGAGGCAA GAGAATGGTG TGAACCTGGG AGGCGGAGCT   102720
TGAAGTGAGC CGAGATTGCG CCACTGCACT CCAGCCTGGG CGACAGAGCG AGACTGCGTC   102780
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FIG. 6.39

TCAAAAAAAA AAAAAAAGGA ACAATAACAA AGACACTAGT CCCCCAAAAA TACACTTGTT   102840
TACAGTGTGA ACTGAAAGAG GAAGGTGGAG TATTGACTTG TTTGACCTCA GCTGGAAATG   102900
TGCACGTCCT GTGACTCAAA TTTTTCTCTG TTCTGTGCAT GCATGTCCAC GAATAACCAC   102960
AAGAAGCACT GAAAGCATTG ATTTTTAGGG TTACAAATTA ATTTTAGCAA GTAAATGAAT   103020
TCACAAATAC GGAATCTGTG AGTAATGAGG ACTGATTCTT TTTTTTTTTG GAGATGGAGT   103080
TTCACTCTTG TAGCCTAGGC TGGAGTGCAA TGGCATGATC TCGGCTCACT GCAACCTCCG   103140
CCTCCCGGGT TCAGCCTCCA CCTCCCGGGT TCAAGCGATT CTCCTGCCTC AGCCTCCCGA   103200
ATAGCTGGGA TTACAGGCTT GCACCACCAT GCCCGGCTAA TTTTTGTATT TTTAGTACAG   103260
ACGGGGTTTC ACCATGTTGG CCAGGCTAGC CTCGAACTCC TGACCTCAGG CAATCCACCC   103320
ACCTCAGCCT CTCAAAGTGC TGGGATTACA GGCGTGAGCC ACCGCGCCCG GCCGAGGACT   103380
GATTCTTATG TCAGATGGCA CTAAATGCTA TGGAGAAGAG GAGTGGATGA GAGGGAGAAG   103440
TATTTTAGAC CAGGTAGACT TGGAAGGTTT CTTGGAGGTG GGTGATGTTT GAGAAGAGGC   103500
TTCAATAAAG TTAGGGAGCT CGCCATGTGA TTGCAGGAAG AGCGTTCCAG GAGAACAAAA   103560
GTCATGAAGA GTGAGTGCTA GGCATGTGTC TGGTCTGTTT GGGCTGCTAT AACAAAATAC   103620
CTTAGACTGG GTAAAATGTA TAAATAATAG AAGTGTATTG CTTATAGTTC TAGAAGCTGG   103680
GAAGTCCAAG ATCAAGGTAT CAGCACATTC TGGTGAAAGC TGCTCTGCTT CATGGCTGGT   103740
TCTCTCACTG TCCTCACATG GCATAAGAGG GGCACAGAGC CCTCAACCGT CTCTCCAGTG   103800
GCCCCATCTC TTAGTACTGT TGGATTGGGG ATTTAGACTT CACTAATTTT GGGGGGACAC   103860
AAACATTGAG ACCACAGCAG CATGACTGAG GATAAGCAAG AGGCCAGTGT GGTTGAGCAG   103920
AGTGATCAGT GAAGGAGAGT TAGGACATGA GTAAAGAGGC TAGCAGACAC CAGATCTCAT   103980
ATGGCTTTGT AGGCCATAGT GAGGACTTTG TTTAAGCTGA GAATAATAGA TAACCTCAGG   104040
AAAGTTTCAG GCAAGAGGGT AACATGATCT GATCTGGGTT TTAAAAGGAT CACTGAAGTG   104100
GGGAGACTGT CTACAGATGG TCTGAATAGG AGTCCTAGTC TATTACAATC TCCTTGGAGT   104160
TTAGGGTGGT AACTGGAGGT GTTCAAGAGT AGTTGGATTA CTGTTGGATT TCAAAAGTAG   104220
AGCCAACACG ATATGTGCAT TGGCTGTGAG GTAGAAGAGG AGTCAAAATG AACTCCAGGT   104280
TTTATTGACT GAGCAATTGT GCCATTTCCT GAGATGGGTC AGATTTGGGA AGGAAAGAAT   104340
TTAAAGGGGA TAAGATAATC CCATTAGGAG TGTGTTAAGT GTGAGATTCC TATTAGACTT   104400
TCGAGTGGAG ATGATTTAAT AGGAAGATAG ATCTGCAACA CTGGAGCTCA GCGGAGAGGG   104460
ACACCCTGGA GATAGCCGTT TGGGAATTAG GAATGTGTGG ATCATGTTAT AGGATGGGGT   104520
CATTTAGGGA CTTAAAACAG CTCTGAAGAA CAAAAATGGT GCCTTGATCT TGGACTTCCT   104580
GGTTTATAGA ACTGTGAGCA ATATATATAT ATTTTTTTCA AGACAGAGTC TTGCTCCGTC   104640
ATCCAGGCTG GAGTGCAGTC GCACCATCTC GGCTCACTGC AACCTCCACT TCCTGGTTCA   104700
AGCAATTCTG TGCCTAAGC CTCCCAAGTG GTTGGGACTA TAGGTGTATG ACACCATGCC   104760
CGACTAATTT TTGTATTTTT TTGTAGAGAC AGGGTTTTGC CATGTTGGCC AGGCTGGTCT   104820
CAAACTCCTG ACCTCAAGTG ATCTGCCTGC CTTGGCCTCC CAAAGTGCTT GGATTATAGG   104880
CGTGAGCCAC CATGCCCAGA CTAAATTTCT AACATTTATA AATTATCCAG TCTAAGATAT   104940
TTTGTGATAG CAGCCCAAGC AGACCAAGGC AAAGGCCAAG CACACTTGCT CCTCCTGACT   105000
TTTGCTCTTC CTGGAATGTT CTTCCTTTAG TCACATGGTT GCCTGCCTAG CTTCATTCAA   105060
TAGGAGTGTG GTGCCCTGAA AATACAAGGA AGAATGCTTT TCTTTTTTTT AAAAGGAAGG   105120
GATGATTATC TGTCAGATGC TGCTGAAAAA GAGTAATAGA GTAATTGGCC ACTGGCTCTG   105180
GCAATAGGGA AGTTAGCTCT GCTAACTCCA CATGAACAGT TTCACATGAA CAAGTGTGAG   105240
TGGGCTCAAG AGAAGGGATG GTGAGAAAGT GGAGCTATGG ACTCACTCTT GAAACATTTT   105300
CTGGTGCCTC GTAGGGCAAT GTGAGGTCAA GGTTTTTGTT ACTGTTCTGA AGATGGGAGA   105360
GGCTGACACA TGGATGTTGT AGGTGAGAGA AGGGGCGCTT GCGGGGGCAA ACTTCTCCAG   105420

FIG. 6.40

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GGATGGGATT CCAGTGTCTA AGAGGAGGCG GTGTGACCCT AAGAGCTAGA AAAATTATTT   105480
TATTAATAGG AAAGACAAAG TACTTAGGCT CAGATGCTAA GAGATTTGCT GATAAAAGAA   105540
TGAGAACGGT CTCTTCTGAT TATTTTCTTG GGGAAATAAA TAGATCATCA GCTGAGGGTG   105600
TGAGGGGAGA AGGAGTTGAA CATGGAGGAA GACAGGTGTG AAATATTGGT CTCAGAATGG   105660
AGAGCGAATT GAATAGGGAC ATGCAGTGGG CTTGCTAAGC TGTGCGGAGA GCCCGTGGGA   105720
AGTTTATGGT CATCAATTTA ATGGCGACCA GCCAAGATGG TGGTTTATTT TTCTCCAGTT   105780
GTATTTAACT GCTCAGGTGC AGGACAGAGA GACTAAGTGT GAAGTTAATT TCAGCCAACG   105840
TAGAGGAATT GTCAGGCAGA TGGGACAAGG AGATAGAGGA GAAAAGGAAT AAGGCTTCCT   105900
GCAAGGGTAA TGATTGTAGG GATGGATAAG TAAGGAACAC AGGAAGTGGC TGTCTGCTGA   105960
GTGGTGGCAG AGCTCAGTGG GTCAGAGCAA GGTTCAAAGA ATGGCAGAGA GGCACTTGTG   106020
GAGGAAGTAA GCTGGCTAGA AAGTAGTGTG CTTGAAATTA AGCTTCTGGA GATAGCAAGG   106080
TTACAGGTGA TGACAAAGTC TGAGTATGAC AAGGAAACTG CAGGGCCAGA GTTGGCAAGA   106140
ATTCATGAAA AATGAGGAGA AAGAGGCACC AAGAGGCTGG GATAGCACAT GGATTGTCTC   106200
TGTGTGAGGC AAAGTCATCT AAATGGCAGC AGTGGCCCTA GCAGAAAGAA ATATACAGTG   106260
AGCCGGAGCA AAAATCCTCA AGGACAGGCA GAACGCCATG AAAACGGCAG ATGACAGCCA   106320
AAGGAGCAGG GGCAGGGGCT CAGTCCAAAG TGTTTCAGAG TCACTGGAGG GTTGAGTGGG   106380
AAGGGGAGGG AGTGGCTGAA ATGGCAACAA GGAAGAACCT CTCTCATCTC CAGGCCCAAA   106440
AGTATGTGGA ATGCGGGAGA TAAGACAGCC ACCACTGGCC AGGGCTGTAA AGGGACATTC   106500
AGCGAATATT CAGGTTCCAT TTAGCACGAC AGCAGGGAAG GGACTGTTGG CAGAAAAAAA   106560
CTGGGGCAGT GGGATTAAAG ACAGACCACA CATTCCAAAA GGCACCGTGG GAGGGTCAGG   106620
GGGCGAGGTT AGGTCTAGGC TTCAGTGTCC TGGGAGACTC AGTCTTCACA GGGTGACAGC   106680
GATCAAGAGT GCAGCTTAGG CTGGGTGCAG TGGCTCATGC CTGTAGTCCC AGCACTTTGG   106740
GAGGCCGAGA CGGGAGGATT GCTTGAAGCC AGGAGTTTGA GACCAGTCTG ACCAACATGG   106800
CAAAACCCCA TCTCTACTAA AAATACAAAA ATCAACTGGG CATGGTGGCG TGTGCCTGTA   106860
GTCCCAGCTA CTTGAGAGGC TGAGGCAAGA GAATCACTTG AACCTGGGAA GCAGAGGTTG   106920
CAGTGAGCTG AGATCGTGCC ACTGCACTCC AACCTGGGCA ACAGAGTGAG ACCCTGTCTC   106980
AAAAACAACA ACAACAAAAA AGAAAAGAGT ACAACTTATG AAGGGGTCTC CTGGGGAGAG   107040
GGTTTTTGGG ATTCTCCTGC CTCTCAAAGT GCTGGGATTA TGGGCGTGAG CCACCACACC   107100
CAGCCGAGGG AGGCTGAGTT CTAATTGTTG TATCTCTCTT GGGATTGGCC TCCTGGGCAG   107160
TTTAAAAGAC AAGGCAAGGA ATCTTTTGGA GAAAGAGACT GGGGGCAAGG TGTGTCTGAA   107220
CAAGAAGTGT GAGAAGCTCT GTGGGCTCCC TTCAGACTTC CAGTCGTTGA ATTGGGATCT   107280
CATTTATATC AGCTCTAGGT GTAACGATAT TAAATCTTCT CTGTCATTTG GCAATTTTGG   107340
TTTATGCTTG ATCATCATTT TTAATGTTTC GACATGTAGA AGTTTAACAT TATTTTACAT   107400
TCTTTTCCTT CTGGCATCAT GTTTTAGCAA GATTGTTTCC ACCAAAAGAA TATATATATC   107460
TTCTAATGAA ACTACGTTTC TTTTTTTTTT TTCCTTTGCT TTCTCTTTTG GTATATGAAT   107520
CTTTGATTAT TTGTAATGTA TTTTGATGTG TAACACTGAA GTTTCTATTT TGTACTATTT   107580
TTTTCCCCAA ACAGTAAACT TATTGTTCAA ATACTTATTG AACAACCTTC ACTATTCTTT   107640
AACCATTTAG AATACGCCAT TCACATATCT TTCATACTAC ATTTAATAAC ATTTTTTAAT   107700
TAAAAAATAT TCTACTGATT TGTTTATTTT GAGACCAGGT TATGAAACTG GCTAATTTTT   107760
GTATTTTTGT TAAATACCGA AATTCACTGT GTTGCCAAGG CTGGTCTCGA ACTCCTGGGC   107820
TCAAGCAATC TGCCCACCTT GGCGTCTCAA AGTGCTGGGA TTACAGGTGT GAGCCGCTAC   107880
ACCCGGCCAC ACCCGGCCAA CACATATTAT TTGTTATTAC ATTTAATTCC CACAGTACAT   107940
TGAAATTATC AGGGAAAAGT TTTCAGTGAA ACATTATTGA ACGCCACATT AAAAGTGTAA   108000
ATTACAAAGA TTTAATGCCA ATTTTTCAGA AGAAAAAAGA CCAGGAGGAA GGTCTATGAA   108060
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FIG. 6.41

GTTTTAGCCA GTCTCTCATC CACCTACCAT TTCACGATCA TGCACTGTGT AAGTCAGGAA 108120
AAGAGTAAGA AAAGTGAAAG ATACAATTGA TTAGAGAGTT TTGCTGGATA CTATAGATGA 108180
AAAGAACACA AAATGGAACA GCCTCTTCAA GCTTAGAGTC AACGGCTGTA GTCCCAAAGA 108240
CTGTAGTCAG AGGCGGTAGG GCCAAAAGAC ATGACTTATG GCATTGGAGG AAGAGGATGC 108300
TTTGGGAGTT CATGGTAGAA GAGGCGGAAA AAATCTGGTG GATTAAAGAA AGCATCCCAA 108360
AGTGACATTA AACTAATGAC TAAATTCTGA GCTGTTTTCA GGGGCAAAGC CTGTTTGGGC 108420
ACCCCTGCCA CACTTAAAGA GTCACCTAGG TATGGTTCGT GGGCTCTGAA CAGGCCTGCT 108480
CAGTGAACAT ATTTGTGACT GTTTCTCCGG CCCTTTTAGC TGTATTGAGT AAAATTTAAA 108540
GAGACCATTG TTTTGGCCTA AGCTCCTGCC CTAGGCCCAA AGAACAGACC AAACCTGAAT 108600
GGCTTCACTT GTCCTAGGTG CTGTGTACTC AAACTGAACT TTGAAACAGG TCGGTTTTTC 108660
AAAAAAAGCA AAAGATTCAC AGCAACCAAT TAGAAGAGGC CCGGTCAACC TGAGCCAGCA 108720
TGATGAGGCT CTTCTGCTTT AATCCTACAA GGAAAGAAAC TTTGAAATGA CCAATCTGCT 108780
TTCATTCTTG GTTTCTGCTT TCTTTGGTCT ATTTCTGCCT GTAAAACCTA TCTCCTCTGC 108840
TCAGCTCATT GAAGTACCCT TCTATTTATA GATGGGATGC TGCCCGACTC ATGTATCGCT 108900
AGTAAAAGCC AATTAAATTA TTACACTCGA TTTGTTGGAA TTTTGCTATT TTGACAGCTT 108960
TTCAAAAACA CCAGTAGGTT CACATCCCTA ATTCCCCAGC CAGTGTTCCC TCAAGGAACC 109020
ATGGAAGAAG CAAAGGTGGC TGAAAGGCGC CTCAGGATGC TTCTAAGCAC GGCACATCCA 109080
TGAAAAGGCA CTTACTAATA TTTGCAGGAT AGCAAAGCAC TGCAGTGACG ATAAATCTAG 109140
TATTGGAGAA GTTCAAAATA ATCAGTAGAT TAACACAGAA GCCAGAGCTT ATAGGGAGAA 109200
AAGGAACCCT ATGAAATACT TCAAATCCGA AAACGAACAT GCATTTCCTG TTTAGTTAGT 109260
GCAGGTACGT AAAAGCTTGG TAAAGTACCC TTCTTGCCAG CTTTCTCTTT CTTACAAGCC 109320
TTTTCACTGG CTGGGAGGC TGATATTATC TAAATATGCT GAGGAGGTTC AAGTATCTCC 109380
ACAACTCACC TCAGAGTGAA TGCTCCCCTC GGCCTTAAGG CAATATAAAC CAGCCCTGTT 109440
TAGCAGGATA GCAAAATGTT TGCGGTTGTA AACTGGTGTC CCATTGGCTG TGGCGCTTGT 109500
GGTGTAAAGA ATCCCTGTGC TTGGTAATTA ATAGAGAAAT TCTATATTTT AAACTTCAGT 109560
TGTATATTGG CTCTTATCCA TGGCAGATTT TCACGTATGT GTTATTTTTT TATTTATTCA 109620
GAGCCGGAGT CTCGCTTTGT CGCCCAGGCT GGAGTGCAGT GGCGCGATCT TGGCTCATTG 109680
CAGCCTCTGC CTCTTGGGCT CAAGCAATTC TTCTGCCTCA GCCTCCCTAG TAGCTGGGAC 109740
TACAGGTGCA TGCCACCACG CCCGGCTAAT TTTTTGTATT TTAGTAGAGA TGGGGTTTCA 109800
CCGTGTTGCT CAGGCTGGTC TTGAATTTCT GAGCTCAGGC AATCCGCCCG CCTCGGCCTC 109860
CCAAAGTGCT GGGATTATAG GTGTGAGCCA TCATGCTCGG CCCTATGTGA TATTTATTAC 109920
AATGAATTCC AATGATCAGA CCTATACTCA AGTATAAGTG AATATATCAT TCAATGAAGT 109980
ATAAATGATC ATTATGTTCA TATTCACACA TACAATAATG TACTCAAGTT TATTGCTAAG 110040
GTAATTCAGA ATCTCCTTAT TTTGAAGTGT GCATTTGATA TACCTGTTTG GGAATAACTA 110100
GTTTCTTATC TTTGACAGAA AATAATTTTG TTGTTTTGTT TTTACTAAAA AAGCATGGTG 110160
AAAAATGGCT CCATTTCTAA GAGAGGTAAC TAAAATATCG CAATTTGCTG GGTGTCATTA 110220
AAGTAACTCA CAAGGGAAAA AATGCAAATT GGTATCTGCT GATGGAGTAA ATCTCCGCAG 110280
AAGTGATGAC CCTGAAAGGA TCAATATATT AAAGCCCCTC CCAGCTGGTC ATTCCAGATT 110340
GCAACAATAA AGCATTAAGT GTTAAAACCT CAAGGCAGCT TTTTTTTTTT TTTTTTGTCT 110400
CAAGTCCTTT ATTATTAATT TTATAGACCT ACTTAATTAC TAAGCCAAAA AAAATCAAAC 110460
TTGTTTCTCT TTGTGACTTG TCAATAGTAT TAAACTATTC TGGTTTTTTA TTTTTGTGTT 110520
ACCTTAAAGT CTCCAGTTTA GTAATTTTTC TGTACCTAAA CACTTCGGAT TTGACATGCT 110580
TTGTGGCCTT TATCAGTAGT TAGAATGTAA ATCCAATAAA TAAAGTAAAA GCCAGGTCTT 110640
CAAAACCTGG GGGCCAAGAA CTCTGTTTTA GAGGGCCTGT GACTCTCTTG GACACTGGAC 110700

FIG. 6.42

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AAAATCTCAT CTCTAAATAT GGATATTTTA GGGAGAGGGT CTTTAGGCTG TCATTTGGAT   110760
TTTCACAGGG CTCCATGTAT CCATAAGGTA GTCTCTTGGG AAGTTTGACT TCAATAAATG   110820
AAGTTTAACT TAAACCTAAA ATGAAATTTA ACTGAAAAAC AAAATCCAAT GAAAGATGCT   110880
TTCTTATGCA AAAACAAACA AACAAAAAAA AAACAAAAAA ACCCCAAAAA ACCCAAAGCC   110940
AAAGATTGTT TCTGAAATTA GGTTCTAGGT TCCAGAGCAA CTCCATGGTG GGGAATCAGC   111000
CACATGTAAA GTAAGCTAAG AGTTTGGACA ATTTGTAATA TTTATTCCTA GGTTTCTTTA   111060
AGACCCTTTC AGATTTTGAA TTCCTATTAG TAGCATCAGC CAGGTTCTAA ATGTAGGCAT   111120
CACCATAGAC ACTTCCCCAC TGCTGCAGTC CCCAACACTT GCCCAATTTT CCCTTGAATT   111180
GCACCCATGC TGCCTTCTCC AGGCCTATTT GAACCCAGAA CCTCGTTGTG CCTCGTTTGA   111240
AATATAATTT CCTCCTAACT AGTCTCTGAT CTACTATTTC CCCTACATTG CTGCCACACT   111300
AATCACCTAA AATAGATTTC ATTCTACCCT GAAACAGAAA TCTCTAATAA GTTACTCCCT   111360
TCCCTTACGG GGTAAAGTTA GCCACATCCT AGGTATTCAA GGACCTTCCA GGAGCTAAGA   111420
ACATTTCCCC TGCACCTTCT TGAAGTACAC TTGTCCTATG TACTGGTTAT GTTCATTTCT   111480
TACCCTCGCT CTCGTTTTGT CTGGAATTTT CCTTGGCCTT AAATGCCTCT CACCTGCCTG   111540
CCCACATCTC TCAGGGTTGT TTCAAATCCT CAATGAAGGC TCACAGCCCC AGTCTATGTT   111600
GGCCACTTAC TTCGTGGCCT GGGAACATTT TTCTTTGGCT GACTTGCTGA CACTCCATCA   111660
GATGCATTTT TATCTGGTTG TCCATCTGTG AACCATACCC TGAGAAGGCA GAGAGTGCCT   111720
CTGCACTGAA CATGTGCTAG GGGACAGGTC TGTGCTAGAG GGGCAAGCAC TGGGAATGAA   111780
GAACTGGTCC CTACTCCCAA GGAGTTCATA TCTCAGTGGA GGTGACAAGC AACTCACTGT   111840
TTCCGGGGGT TGTGGTGACT GCTGGGAGAA GGGGTGTCTA TATTAGATCG AAGCAGCATC   111900
AGGGGAGGTT CCCTGAGAAG GTGATGCCTC AGCGGATGTC TCCCAGCTAA GTGGGGTGGA   111960
GGTGGAGAAG GGCAGAGCAG GGAGAGGATC TAGGTGGGGC GTGTAAGTCT GCATGGGTAA   112020
CTCAGGGAAC CCTTGGTAAC TGCATGTAAC TGTGTGAAGC TTTCATGAAG GAACATGGTA   112080
GGAGACTAGG GTATGGACTA TAGAAGCCCT TTTGCTAAGC TCAAGAATTT GAGGCCGGGA   112140
GCGGTGGCTC ACGCCTGAAA TCCCAGCACT TTGGGAGGCC AAGGCGGGCG GATCACGAGG   112200
TCAGGAGATC GAGACCATCC TGGCTAACAT GGTGAAACCC CGTCTCTACT AAAAAAAAAG   112260
TACAAAAAAT TAGCGGGGCG TGGTGGCGGG CGCCCGTAGT CCCAGCTACT CAGGGAGCTG   112320
AGGCAGGAGA ATGGCATGAA CCCGGGAGGC GGAGCTTGCA GTGGGCGGAG ACTGTGCCAC   112380
TGCACTCCAG CCTGGGCAAC AGTGCAAGAC TCCATCTGAA AACAACAACA ACAACAAAAA   112440
ATTTGAAGTG TATCTTGAAG GAAATCCCTT GGAGCCTAAA AATGATCATT GATAACAGAA   112500
AATGATCTCT GCTCTCGCCT AGGGTAATAT ATTCAGCTTC AAAGTGGAAG GGCATGTTTT   112560
CCAAGGGCAT GTTTTCTAAG TCCCTGTAAT TGTAGTGATA GCAAATATAT GCCCTGCATC   112620
TTGAAATGTA AGACTAGGTT TGAACAGTAT ATAAATTATC TTATGATCTA ATTTCCCCTC   112680
ATTTTGTGGT TTCTACTATA AGCTACCCAG AAGTGTAGAC AGGACGTTTG GAATTTGATG   112740
GGCATCGGAA AGATTCCTAC CTAAGAACAT TTTTTTTTTT TTTTTTTTTT CTGAGAAGGA   112800
GCCTTGCTCT GTCACCCAGG CTGGAGTGCA GTGGCACGAT CTCAGCTTAC TGCAACCTCC   112860
ACCTCTCAGG TTCAAGTGAT TCTCCTGCCT CAGCCTCCTG AGTAGCTGGG ACTACAGGTG   112920
TGCACCATCA TGCCTAGTTA ATTTTTATAT TTTTAATAAA GGCAGGATTT CACTATGTTA   112980
GCCAGGCTGG TCTTGAACTC CTGACCCCAT GATCTGCCCA CCTTGGCCTC CCAAAGTGCT   113040
GGGATTACAG GTGTGAGCCA CTGCGCCCGG CCTCTAAGAA AATTTTTGAG AGCTACTTGT   113100
TCTGTTGCCT GGAATTCCAC CGTAAGTACG ACGTTGTGTC TCCTTCTCCA GGGCTACTAA   113160
CTAAACAACA GAGGGTATTG TGTTATCGAC AATTATTTGA TTGATAACTA TCAGCAAACA   113220
TTTGCCAAGG CATTCCTTTA AAGATAGCCT AGTGACTCTA TTAACTACTC CTTCTTCCAG   113280
GCTTCTAAGT TCTGTTGGAG GTAAGTAGAT CCCAGAGATA AAGCACCTAC CATAGGACCT   113340
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FIG. 6.43

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GAATCTTGGT AGAAATAAAT TATATCATCA TGTTATCATA TTATCATGTG TTTTTCTATC   113400
TTTAAAGTCT TATGTGAATA TTCTGCTTGA AAAATATGTG TCCTCTGTTA GACCAGAGTT   113460
GAAAATATGT TATTCAAGAA CTTGTAACAG GAACCCGCAC AATTTCTGCT GGAGTTTAAT   113520
TTCAGGGTTA ATTCTGTCAG CAATCTAAGG TAAACATTAA CATTTTTCCC TAGATTCAAG   113580
TCCGTTGTCC AAAAGCTGTA ACAGAACTTA ACTGAATAAA TAGTTTCTTA AGATGGTAAG   113640
CTTCCATATG CTTATAATGA CTCCTCTACA CGTTTTCATC TGGAAGGCTG CTCATGCTTT   113700
TGGAAGCAAA GAAGACAATC TTAAATAACT ACATTTGCTT TTTGGTGGTG CCAGATTTTT   113760
CTGAGAAACA CCAATGGAAT TTATAAATTC ACCAGTCAAT GGGCAATTGA GTTGCTGTTT   113820
TGCTATTACC ACTGCCGTTT GTGAGCATTG TTGGGAAGGT GTCTTGAAGC ACACGTGCAA   113880
GTTTCCCTTG GATAAGTAGT AGGAATAGAA TTGCCAAACC ATGGCTTCCA GTGCAGACAC   113940
AGTCTCTCCC TTGGGCCCAG CCACTAGGCA CCACACATTA AGAGGATATT GTCTGTCCAT   114000
GTCCTAGAAA CGTTGTAGCA TCATGCTCCT ATTCGATTAA AAATCTCATT ATTAAAATGA   114060
ACCATCGGGT AAATGTTGTC TCGGGAAAAG AAGCACTGAC CGTCCCTGGG TGGGCTCGAA   114120
CCACCAACCT TTCGGTTAAC AGCCGAACGC GCTAACCGAT GCGCCACAG AGACCCAGTT   114180
ACTCAGGCCG CGCTGCGGTG TGTACAGATT TCCGCGGCGC CGGCAGCCGC TCTAGCCACC   114240
CTGGGCGTCG CCACCCCAGG CGTTGCCACC CCAGGCACGG GCTGAGAAGT CGCGGGGCGC   114300
GCCGAGGAGG CAGCGGAAGC GGCCGAGGTG CCCAGCGGCC GCCGCGGGGG GAGAGGCTGT   114360
GCCCCGGCGC GCGGGAGGGG GCGGGCGAGG CCGCGTGACT CCGGGCTTCT CTGGGGACGA   114420
AGCGCGCCCC TCGTGGCGGC AGCGGCCAGT GGTCCGCAGT CGGCCCGGAC TCGGGGTAGG   114480
AAAGATCCTC TCAGCAATGG CTGCGCGCCA TGCGTGCTCT GCGGCGGGGA CCGTGCCGGC   114540
CGGGCGCGCC ACCAGTAACC AGGGACCCAG GGGAGAACCT GCCAAGGGGA ATAGGTCGCA   114600
CGGAGAGAAT ACGACACGCT TGGAGGGAAG AACCACGTGC TGTACAGGTT TAAAGGATGG   114660
AGAGTCACGT GCGCTTAGGT CCCAAACTTA AGGGACCTAA CCCTTTTTCT GGGTTGCCGC   114720
TATTGCCCCT TCTCCTTAGA CAGTTTTTCA TCTCATCACC TCTCACCCCG TAAAATGCAA   114780
CGAACATAGA TAGGCTGTGT ATCAATGTAG ACTGTATGTA TATCTGTGCT TCGTACATAA   114840
AAAGAATATG ATTTTTGCCA CCTTCTAAGA ACCAATTTGC ACCCCATTTT GAGGCATATG   114900
GCCTCTGTTG AGATTGCATA GTTTAGGGGA CATCAAAAAA GCCTTATAGA GGGACTGGCA   114960
ATTAAGATAG CCTTTCAGTT TGAAATGGCC ATTGAAGGCT TCTCCCTTTC CCTGACTTCT   115020
GAATTTTTTT TTTTTTTTTT TTTTTTTTTT TTTGAGATGG AGTCTTGCCC TGTTGCTGGA   115080
GTGCAATGGC GCGATCTCGG CTCACTGCAA CCTCCGCCTC CCGGGTTCAA GCGATTCCTG   115140
CCTCAGCCTC CCGAGTAGCT GGGAATACAG GCGCCTGCCA CCACGCCCAG CTAACTTTTG   115200
TATTTTTAGT AGAGGCGGGG TTTCGCCATG CTGGCCAGGC TGGTCTGGTA CTCCTGACCT   115260
CGTGATCCGC CCGCCTCCGC CTCCCAAAGT GCTGGGATGA CATTACAGGC GTGAGCCACC   115320
GTGCCCGGCC AATTTTTTTA GGCGCACTGT TCAGTGGCAC TAAGTACATT CACATTGTTA   115380
TGCAACTATC ACCGCCATCC ATTTCCAGAA CCTTTTCATC TTCCGAAACA GAAGCTCCCT   115440
ACCCATTACA CGGTAACTCA CGATTCCCCT CCTCTAGTCG GAACAATCAC CATTCTACTT   115500
TCTGTCCCTT TGAATTTGAC TACTCTTAGA GACCTCATGT AAATGGAGTC ATACGGTGTT   115560
TGCCTGTGGC TGGCTTATTT CACTTACCAT ATGTCTTCAA GGTCCATCCA CGTTGTAGCC   115620
TGTGTCAGGA TTTCCTTCCT GGATAAGGCT GAATAAGCTG CACTGTATGC AGGTATCGCA   115680
TTTTGCTTTT CCATTCATCT CTCCGTGAAC ATTAGGGTTG CTTCCACCTG CAGCTATGAA   115740
CATGGGTCTA CAAATAACTG ATTCCCTGCT TTCAATTCTT TTGGGAATAT ACCCAGAGAT   115800
GGAGTAGCTG GATCACATGG TTTGCTATTG GCTGTACCAT TTTACATTCG CACCAACAGT   115860
GTACAAGAGT CCCTATTTCT CCTCATCTAT TTTTTTTTTA AATAATGGGC ATCCTAATGG   115920
GTATGAAGTA TCATCTCATT GTGGTTTTGC TCTGCATTTC TCTAACGATT AGTGGTGTTG   115980
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FIG. 6.44

GGCATCTTTT CCAGACACCA CCAATCTGAA TTCTATGGCC CTTCGTTTAC TCACTTCCTC 116040
CCAGCAAGAG CCATTTCTGC TTCAGCAAGG AGGAAGCTGC GACTGATAGA GGGAAAGGGC 116100
CCAGGGGGCT TGCAGAGTGG GGCCTGTGCC ATGCAAGGAG AGGAGAAGAA GGTGGATCTT 116160
TGAGTAGGAC TATCTGGAGA TCCTGCTTTC ACAAGGTCCT TGCTTGTGTG CTGGGCAGCT 116220
TTTGGAGCTA GTTATCTTTA TTTTAGCCCT TGAGGGATAT TTAGGCATGT GGTGCTTGTG 116280
AGCAGCCAAT CCATGAAGAA GGAACTGATG GTCTCCACCT TGGAAATATT GGAAGAGATA 116340
ATGCCGTCCA AATTGCAGTT TTAGAAGTTA ACTTAAAATT ATGCTATTTT AATGGAATTT 116400
TGGGTGCATT TCCATTTTCT TCTTAAGAAT TGCTGGAATT TCTTAAGTGT TTAGGTGATG 116460
ATCTCTTTTT GTGATTCCTT TTTTAAAAAA CAACAACAAA ATCTTTCAAA TACATAAGAA 116520
ATAGGCCGGG CACGGTGGCG TAATCCCACC ACTTTGGGAG GCCGAGGAGG GCGGATCATG 116580
AGGTCAGGAG ATCAAGACCA TCCCGGCTAA CACGGTGAAA CCCCGTCTCT ACTAAAAAAT 116640
ACAAAAAATT AGCCGGGCGT GGTGGCGGGC GCCTGTAGTC CCAGCTACTC GGGAGGCTGA 116700
GGCAGGAGAA TGGCATGAAC CCGGGAGGCG AAGCTTGCAG TGAGCCTAGA TCGCACCACT 116760
GTACTTTAGC CTGGGCGATG GAGCAAGACT GTCTCAAAAA AAAAAAAAAG AAAAAAAAAG 116820
AAAGAAATAG ACCTTTATTT TTCTGTAACT CCACAAAATT TCTATTTTGA TTCCCTATTA 116880
TTTTGCTATT GTCAACACAG TCTCAGTCAA TTCAAGATCC TGTTTGTGCC TTTCCCTGGA 116940
GTCATTTCCA AGTGCTAAGG CTTTGGTCCA TGAGTCGCAT GTGCACACTC ATGGCTGTAG 117000
AGGGAGTTTT GCTCCCGGTG AAGGTCTTGG TGGCTCTTCT ATACCTTGAT TGAGGGAAAG 117060
GAATCTTATG TGAAGTTAGC TTTGTTGTAT CAGATATTCC ATAAAGCCAT TTCTGGGACA 117120
GTCCCCTCTG TTTATCGGAC CACAAGCTTC TCTGTCCTCA TCAAGCCCAC CTTTATACTT 117180
CATTTCTCCA GACTTCATGT CCAGACTGTG GGATGAACAA GTGGTTATAA GGTTTTAGAG 117240
GCTCCTGTAG GACTAGATGG AAGGCAAAAA AAGGAAATAA CCTTTAAGCA TGCTCTCGAT 117300
TCCTTAAATC CCATCTGAAA GTCTTAAGGA TGTCTTCTCA GTCATACTTA TTTGACAATA 117360
TTACCTAATT TTCTCCATTA GCCCAAGCTC AGGGGTCTTT CTTCTTCCAT ATTCACATGG 117420
GTGCAATGGT TTTCTGAAAG GAAAACAGCA TTACTAGGGC AGTAACATTT AATTAATCAC 117480
AGGTACTTAT CAAACTACAA AACAGGCATT CCAGGAACTG GGTGTTTCTG TTTGTAAAAT 117540
TACACTCTCG TGTACATGCT CCCACTAAAA TGTAAGTTCG CTGAGGATGG AGGTTTTGGT 117600
CTCTTTGCTC TGTGCTGTAA CCCCAACACT GCAGCAGGGC CTGGCACATA GCAGGCATGC 117660
AGGGACTATG CACTGAATCA ATGAGGAAAT GAAAACCAGG ACCATGAAGT AAACTGGACA 117720
AAATAAAATG TGATAGAAAA TCTAAATTCC TAATACATAA GGAGCACTTA TCAATTGATA 117780
TTTACAAAAT CTTTTTACAA TTCAATTAAA GACAACATAA AACAAATAAG AATGGGGACA 117840
GGAACAGAAA ATTCCCCCAA AGAAAAAAAT ATATATACAT GGTACAGCCA TTGTGGAAAG 117900
CAGTATGGAG TTCTCAAAAA TATTAAAAATA GAACTATCAT ATAATCCAGC AATCCCATCC 117960
CTGGGTATAT ATCTAAAGGA AATGAAATCA GTACCCCAAA GAGGTGTCTG CACTCCCATG 118020
TTTATTGCAG CATTAGTTAC AACAGCCAAG ATATGGAATC AACCCATCAG CAGATGAAAG 118080
GATAAAGGAC ATGTGATACA TATACACAAT GGAGTAGTAT TCAGCCTTAA AAAAGAAGAA 118140
AATCCTGTCA TTTGCAACAA CATGGATGAG CCTAGAGAAC ATACTAAATG AAATAAGCCA 118200
GGCATAGAAA GACAAATGCT GCATAGTCTC ACTTAGGTGT GGAATCTAAA AAAGTCAAAT 118260
TAAAAAAAAA TGTCAAGCAG AGAATAGAAT GGTAGTTGCC AGGGACTCTG GGAAGTAGCA 118320
GGGGTGGGGG TGGAGGGGAG GGGATGGGCA GAAGTTGGTC AAAAGGTACA AAGTTTCAGG 118380
TAGACAGGTG TAAGTTCTGG GGATCTATTG TACAGCGTGG TGACTGTAGT TAATACTGTA 118440
TTGTGTACTT AAAAATTGCT CACCAAAAAT GTTCTCACCA AAAAAATGAT GTTTGGATAT 118500
GTTAAACAGT TTGATTTAAT CATTTTGACG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG 118560
TGTATACATC AAAACATCAC ATTATATACC ATATACAATT AATATATACA ATTTTTGTCA 118620

FIG. 6.45

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AAGAAAAAAT GCACATGACC AATATGATAA AAGTTTAGTC TCACTAGTAA TAAAAATCAA   118680
AATTAAATGA AATAAAAATT TCTTTCCCCA AATCGCAAAA GAGAAAGAAA GGTAATACTA   118740
AAACACAGTC ACGGTGTAGT GAGAGGGCTG CTCTCACACA GGACTGATGA GAATAAAATT   118800
GGAGAGCAGT GTGGTAATAT ACATATTAAA CAATGTATAT ACCCTCTCAT TTTAGAAATT   118860
CTATATTAGA AATCCATCCT AAGAAAATAA CCAGGGATGT GATCAAAATT TTGAATGCAG   118920
CAGCACAGTA TTATTTATAA TAGTTATAAA TAAGAAACAA CCTGAATGTC CAGCAACAGG   118980
CAAAAATGAT AAATAAATTG TGGCATATTT AAGCTGGTGG CTCATGCCTG TAATCCCAGC   119040
ACTTTGGGAG GCTGAGGCAG GAGGATCTCT TGAGGCCAGG AGTTTGAAAC CTGTCTGGGC   119100
AACATAACGA GACCCAGTCT CTACAACATA TTTTTTAAAA TTAGGTGGGG CATGGTAACT   119160
CATGCCTGTA ATCCCAGCAC TTTGGGAGGC TGAGGTGAGC AGATCACCTG AGGTGAGGAG   119220
TTTGAAACTA GCCTGGCCAA CATGGTGTAA CACCATCTCT ACAAAAAATA CAAAAATTAG   119280
CCAGGGTGGG GTGCGTTCCT GTAGTCCCAG CTACTCGGCA GACTGAGGTA GGAGAATCAC   119340
TTGAACCCGG GATTCGGAGG TTGCATTGAG CTGATATCAT GCCACTGCAC TCCAGCCTGG   119400
GTGAGACCCT GTCTCAAAAA AAAAAAAAAA AGAAAAAGAA AAAATTAGCT GGGCGTGGTG   119460
CTGTACGCCT GTAGTCCCAG CTATTCCGGA AGCTGAAGCG GGGGGATTGC TTGAGCCCAG   119520
GAATTTAAGG CTGCAGTGAG CTATGATTGT GCCACTCCGC TCCAGCCTGA GTGAGAAAGC   119580
AAGACTCTGT CTCTTAAAAA AAAAAAAGTG ATATATTTTT AAAATAGAGT ATATTACTTA   119640
TATAGACATC AAAAACAATA TTTTCAAGGG ATATTTAAAA ACATAGGATC ATGACAAAAT   119700
GTAAAGTTCA AAGGTAAGAT GGAGAATGGA GAACTGTGGG GAACTGTATA ATCTGACAAT   119760
TCGTAGTTGC ATACATCTTT CTGTGTGCTG GTGCTGTTAG AACACTTTGT ACGCATCACC   119820
TCATTTAAGT TCAGCATCCC TAGGTGGCAG ATACTATTAT TATATTCCAG TTTTGTTTCA   119880
CGTTGTATAT GCGGTGTGAG CCCCAATATG GGATGTGTGT GTGCACATGT GCAGTATTTG   119940
GAAAGTTCTA TGAAATATTA TTAGTGGTTA TCTCTGGGAG GTGATTTTTA TTCCTTTTCC   120000
AGTATGTTCT CAAGCATTTG CTGCAAGCAG TCTTTTGCGG GGCCAGGGTT GAGAGGCAGC   120060
AGCAGTTTCC CTAAATTACA GATAGAGGGA GGTAGGTGGT TATGCTTGGC CAGATCTCTG   120120
TCTAGGGGTA GAGGAGTGCC TGTGTGTGGG TAGGGACACC GGCGGGGGGC TTTGCCAAAC   120180
ACAGTGGAAC TGTCACGCTG GTCTCTCTTC TCAACTCTTT CACTCACCTG AGAAAAGGGT   120240
GTCTATGGAC CATGCACACT TCTGTGGGGA ATTTTACAAG ATGTGAATCA TCAGTGATGA   120300
AGATGCTTTC ATTTAAAAAG AATTGGAGTA CCTGAGATTA GAGATAACTT CTACCCTTTT   120360
AAAATATTTT TAAAAATTTC TTTGCACTGA TTTTTTTTCT TCGTTTTTAT GAGTTGTTTT   120420
CATTTGGGTG GGATAACTCA ATCTACAGGA GAATATTAAG ACTTTTAAA TTTTAAAAAA   120480
TATACTTTCA AATACTTAAT ACATTTTGTG TTAAATGACA GCCAGCAGAT ATTGACTGAA   120540
TTGGGCTAGA TGCTTCAGGG ATCTCCCTTC CATTTAAGAC TCTCCGAGAG GCCATTCCTG   120600
ACTGCAGGTC ACTGTATTAT TTTTAATTTT AAAATTTTTA CTTACTTATT TTATTTAATT   120660
TTATTTTTTG AGACAGAGTC TCACTCTGTC GCCCAGGTTG GAGTGCAGTG GCACAATCTC   120720
AGCTCACTGC AACCTCCACC TCCCGGGCTC AAGCGATTCT CCTGCCTCAG CCTCCTGACT   120780
AGCTGGGGTT ACAGGTGCAG GCCACCACAC CCCGTTAATT TTTGTATATT TAGTGGAGTC   120840
AGGGATTCGC CATGTTGGCC AGGCTAGTCT CAAACTCCTG ACCTCAAGCG ATCCTTCCAC   120900
CTCAGCCTCC CAAAATGCTG GGATTACAGG CCTGAGCCAC CCCACTCGGC CTACTTTATT   120960
AATCCACTTG CAGAAACAGG ATATACACAA AAACGTTTCA AGGCTGTAAG TGCCACTGCA   121020
TGGCACCAAT GGTAAACGTT TTACAAATTT GAGTCAGGAA CAATCATTAG TGTCACTAGC   121080
AACAAAAATC AAAATTAAAT GAAATAAAAA ATTTCTTTCC CCAAATGGCA AAGGAGAAAG   121140
AAAGGTAATA CTAACACGCA GTCAGGGTGT AGTGAGAGGG CCGCTCTCAC ACAGGACTGG   121200
TAAGTACAGA GCCATGGAGT AAGCAGGTCT TGAGCTGACA CTGGAGAGGA TCCTTTTTTT   121260
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FIG. 6.46

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TTTTTATTTT TATTTTTTTA GAGTCAGGGT CTTGCTTTTT TACCCAGGCT GGAGTACAGT   121320
GGTGCCATCA TAGCTCACTG CAGCTTCAAA CTCCTGGGCT CAAGAGATCC TCCTGCCTCA   121380
GCATCCCCAG TAGCAGGGAC CACAAGTGAG AGGATCCTTT AGTGTTGTCA AGGAGAAGGA   121440
ACAGAGGTGT GGATGGGTGG GCACAGACAC AGGAGCACAG CTGAAGCAGA GGATTACAAA   121500
GGGTGGAGCC TGATGTAAAG AAACCTAATA GGTGACAGAG CATGGAGGCT CTTGAATACC   121560
AGGCTGGAAA CTGCATTAGG AACGGTGCTC ATAATTGCAG AAAATTTTAC ATGGCCTAGA   121620
TAGTCATCAA AGGATGATGT ACAAACAACT ATGGCATATT TATACAATGT GCCGACAGGA   121680
TGCACTGAAC ATTTTGAACA ACAAAGAGAC TTGATAATGG CGAGGTTTTG AGGAGGTGAA   121740
TCAGGATGCA AAAAAAGCAA ACAACTAATA AAGTTGATTG ATGACAAACA CTATCAAAAG   121800
GCAGCCAGGA GAAAAGCTAC TGGTTACCTC CAGGGAGCTG GTGAGGGAGG CTGGGTGGGA   121860
GGATCTACCC TTCTGAATTC TGAGGGCACC TCCAGTGTGG CCCTCAGAAA GCAGGAGCTT   121920
CCAGGCTAGA ATCAGATCCC GACATCCCTG TTAATTCCAC GGATTCCACA CCGAGTCAGA   121980
TTTATGATTT ACTATAGGGT TTTAAAAACC AAATTGCAGG GATGCTAGCC TATCACAGCT   122040
TATCTCAGAC ATTGTCCACT AAGGTATACA GAGTGCTGCC TGTTCCTTTG GTACCCTAAT   122100
CAGGAAACCC CATCAGATCT GCTCCTTCCT ATGGGGTAGT GAGTAACACG AAGGCTTACC   122160
ATCTCACACA GATAACTGGT CATAGGTCCA GCAGAAGTTT AAAACAGAAA ATGAGGAAAG   122220
CCATGTGATT AACTGCTGCC AGACTGTTTG TGTTACAAAC AGCAGTTCCT TAGGCATTGC   122280
CTGGGACATG CAATAATTTC TGTTACACAA TCTGTGGTAG TTAAAATGCT GCACGATGAA   122340
AGCTATCTGA TTTGGATTCA TTATTAGGTG AGCCATCTCG TCTGCAATTT GGTTCCACCA   122400
TTTTCATTTA ACAAATGTAA AAAAGTTTAT TAAGCTCTTA CAAAGTTATG CTGGGCAAAT   122460
ATGCAAAAGT CCAGATCACC TACCGCAGGA ACTAATCTAG CCTCCTCTCT GGGCACCCTG   122520
TTGTTTGGGG CTGGGCAGTT CTTTCCTGTG TAGAACCATC TAGGGCTGAA TAGGTCATTC   122580
TGACACCTGG GCACCTCTGC CTGCTCGTAA ATGGGACAAT CAGAAAGGGC CCTTATGTTT   122640
CCAAACTTTC TTTAAAGTAG CTGTTCTGAA AACATGGTCC AGGGACCCCT GATTGTCCCT   122700
GAGACCTTTG AGGGGATCTT CAAGGTTAAA ATTAATGTCA TAATAATACT AATATGTTAT   122760
CTGTCTTTTT TCACTCTCAC TTTCTCACAC GTGAACAGTG GCATTTTCCA GGTGACAGAG   122820
TGTGTGATAA TGAACCTAAC TGAATGCAGA AGCAAACATG AGAACCTAGT TTTTTCAATC   122880
AAACCAGACG TGAAAGAGAT TTGCAAAAAT GAAAAAACAA TGCTATCCTC CTCACAATAT   122940
TTTTGTTTTA GAAAATAAAG TTATTTTTCC TAGAAATGTT TTTGAGTTTA TCAGTCATAG   123000
GTTTATTATT ATAATTAAAA AATGAAATAT ACATACACAG ACATATTTTT TAAAGTTCTC   123060
AGTTTTAATC TCTTTTTTTT TTTTTTTTTT TTTGAGACGG AGTCTCGCTC TGTCGCCCAG   123120
GTTGGAGTGC AGTGGTGCGA TCTCAGCTCA CTGCAAGCTC CGCCTCCCTG GTTCGCGCCA   123180
TTCTCCTGCC TCAGCCTCCC GAGTAGCTGG GACTACAGGC ACCCGCCACC GCGCCCGGCT   123240
AATTTTTTGT ATTTTTAGTA GAGACGGTGT TTCACCATGT TAGCCAGGAT GGTCTCGATC   123300
TCCTGACCTC GTGATCTGCC CACCTCGGCC TCCCAAAGTG CTGGGATTAC AGGCGTGAAC   123360
CACCACGCCC GGTCTCAGTT TTAATTTCTA ATACAGTAAG TATTGATCAG TGTGCCCCAC   123420
ATTAGTAAAA GCTCTTGGGG TCCTCAGTAC TTCTTTTTAA GAGTTGTCAA GGAGTCCTGT   123480
GACCAAAAAT AGGAGAGCCA CTGCCCTAGA AGGACAGCCC CAGCCCGGGT CAGGAACAAC   123540
TGGGACAGAA CCTACTGCTC CTAGTGGATT GTAATATGAT AGGATTTAAC CTTCAAGGTT   123600
TCAACTCTTG GCAAGAGTCC ATGAGGGGCC ATGGTTTGTC CTGAGCATTG CTTACTGTTA   123660
ACAGGAGCAA GTTCCTTAGG CTGGTGAGCC AAGCCAGCCT GACGCTGGCC ATGGACATCT   123720
TAGTGGGCTG CTTGTTCTAG TGTGGGTTTT CATTTTATGG GAAATGTCAT CTGCTCTAAG   123780
GCTCTTCTCA TTTGGGGAAA TCACAAGTTC TCAGAATGTT TGTCTCTCTT GGTTGGGGCC   123840
TCTATAATTA AATTATAAAA CAGAGGTAAT GGTTAAGTAA TGCAAGATTT GACAGAAACC   123900
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FIG. 6.47

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ACAGAGGATT TAGGGTTTAA TTTGAGTGAG GCAAAGGGGG GATGAAGATG AGCGGTCCTG  123960
GAGACAAGAA AAAGATTGGA TGAAGCTGGG CACGGTGGCT CACGCCTGTA ATCCCAGTAC  124020
TTTGGGAGGC CAAGGTGGGC AGATCACTTG AGGCCAGGAG TTTGAGACCA GCCTGGCTAA  124080
CATAATGCAA CCCCGTCTCT ACTAAAAATA CAAAAATTAG CCAGGCGTGT TGGTGTGTGC  124140
CTGTAGTCAC AGCTACTTGG GAGGCTGAGG CATGAGAATC GCTTGAATCC GGGAGGCAGA  124200
GGTTGCAGTG AGCAGAGATC ATGCCACTGC ACTCCAGCCT AGGCAACAGG GTGAGACTCT  124260
GTCTTCTTTT TTTTTGAGAC GGAGTCTGTC GCCCAGGCTG GAGTGCAGTG GCATGATCTC  124320
TGCTCACTGC AAGCTCCGCC TCCCAGCTTC AAGCGAGTCT CCTGCCTCAG CCTCCCGAGT  124380
AGCTGGGATT ACAGGCATGT GCCACCACAC CCAGCTAATT TTTATATTTT TAGTAGAGAC  124440
GGGGTTTCAC CATGTTGGTC AGGCTGGTCT CAAACTCCTG ACCTCGTGAT CTGCCCGCCG  124500
CGGCCTCCCA AAGTGCTGGG ATTACAGGTG TGAGCCACCA TACCTGGCTG AGACTCTGTC  124560
TTTAAAAAAA AAAGAGAGAG AGGGAGAGAA AGATTGGATG AAACAACAGA GTGGGGAGGA  124620
CCTGTGAGCT TGGTAGCTTG GTGAAGGCAG GGCTTTATTG GGGGCCTTAG AGGGGATCCA  124680
ATAAAGGTTC CCAGTCATGG TAGTGACCTA AAGAAAATAG CATTTTAACA TCTTTCATTT  124740
CATAATAGAC AGTCACAGTT TACAAGACCC TTTCCATACA TTCCTTATGA CATCCATACT  124800
ACAGCCCAGA GGCAAGTTGT GCACTCTCTC CTCTCACAAA TACAAAAACT CAGCCTCTAG  124860
AGGCCAGCGA CCTGCTCAGG GTGATGTGCA ATTCAGGGAT GACAGAGTCG AGGCTCCCAG  124920
CCCAGTGGTT ATCCCTCACA GGCACGTTGC CTGTCAGTGT GCAGTATAAA ACTTTGTACA  124980
AGAAATCAAG TTGCATTAGT CAGTCGGATT CCCCAAATGA TCACATTGTA GATGGTGTAT  125040
GCTGTGGGCA GAGCAAGGGC TGCTGTTTCT TGGGCAAAAC AATCAGTCCC CCTCCCCCCC  125100
AAAATAAATG AATGCCAATG GTGTGACTTT ATTTTATTTA TTTTATTTTT ATTATTATTT  125160
GTGAGACAGA GTCTCACTCT TTCACCCAGG CTGGAGTGCA ATGGCATGGT CTCGGCTCAC  125220
TGCAACCTCT GCCTCCTGGG TTCAAGCGAT TCTCCCGCCT CACCCTCCCG AGTAGCTGGG  125280
ACTACAAGTG CATGCCACTG CACCCGGCTA ATTTTTGTAT TTTTTTTAAG TAGAGACAGG  125340
GTTTCACTAT GTTGGTCAGG CTGGTCTTGA ACTCCTGACC TCATGATCCA CCTGCCTCAG  125400
CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACCGCGC CCAGCAATGT GACTTTATAA  125460
TTACAGAATG TAGGACTCAG CTCCCACTAT TGTTATGACT CAATATTCTC TTAGATAATG  125520
TTTGGGGCAC TAGCTTACAG GCAGCATTGC CCGGTGGTTA ATGTTGTAGC TTTGCAGGCA  125580
GACTGACCAT ATTAAAATTC GATCACACCA TTTGCTAAGC CTGTGGACTC GGGCACGCTT  125640
CTTTCTCTGC GTTAGTTTCC TCCTCTGTAA AACACGGATG ATGCTATAAA CACACCCAAG  125700
TCCTAGAATT GTTATATGAG TTAGAAAAGA TAGGCAAATA CAACTCTCAC AAGACAGCCT  125760
GGCCTCCAGT AAGTGCCACT GAGTGTTTGC TCTTATTGTA CAGTGGCTCC AAGTGCTTCT  125820
GTCTTGGATT ATTTCTGACC AGGTGGCTAT GTCTCCTAGT AACTTACCAA TCCTGTTGAG  125880
TCTTAATAAG CACGTCTTTG ATGCCTACAG TGCGACTGAA TTTCCAGGCC TCATTACTGG  125940
AGACACAATC ATCCTATATG CTTTTTTCCA TTTGTTTTTA ATAAAGTGGT ACATGTGTAT  126000
GGCACCAGAT CAAACAGTAC AGAACAAGTT ACAATGGAAG AGAATGGCCT CCCAGCTTTC  126060
CTGAAATCCT CAACTCAGAG ACAACTTTTT TTTTTCTGAC GGTTTCTTTA TACAGCCCTT  126120
TTTGTGGTTA CCTTCCTAAC TCTAGAAAAA CTATTCTTAC CTCTGTTTAT TTACTTAGAA  126180
ACATTAGACG TTACCTTTCA ACTCCTCAGT ATGAAGCTTT AGTTTTCAGC ACCCCAGGCC  126240
ACCACCCTCT TTCCAGGACT TACTACTTAT ACTGGTGGTA GGTGGAATTT TAAAATTCAT  126300
CAGCATTCTT TTGTGATTCT CTGTGTGTTC CAGTTTTACA GCAACCCGTA CTTGTTGCAT  126360
GAGTACAGTA GAACTGGGAG GCTCATAACT TAGCCTGCAG GACTTTTCAC TTAAAGCCTG  126420
GCCCTCAGGG TGATGTCACC CACCTCATTG TGCCTGGCTC AGGAGTTTAG TCCCTCAGTT  126480
GCCTGGTTGT ATAGTTTGGA TGTTCAGCAC CTCCAAATCT CACATTGAAA TGTGATCTCC  126540
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FIG. 6.48

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AATGTTGGAT GTGGGGCCTG GTGGGAGGTG TCTGGGTCAT CAGGTGGGTC CCTCTTGAAT  126600
GGCTTGGTGC CTTCCCCATC GTAACGAGTG AGTTCTTGCT CTGGCAGTTC ACACAAGAGC  126660
TGGCTTTTTA AAGGAGCCTG GCACCTTCCG CTCTTTCTCT TGCTCTTCCT CTTCCCTTCC  126720
TTTGTCACTA AAAGCTTCCT GAGCCCTCAC CAGAAGCGGT GCAGATGCTG GTGCCATGCT  126780
TGGACCTCCT GTAGAACTGT GAGCCAAATA AACTCTTTCC TATAAATTAC CCAGTTTCAG  126840
GTATTCCTTT ATACAATGCA AAACAGACTC ACACATCTGG TAAACCCCAG TTGTTTGCTT  126900
CTAGGTAAGA CGGGAGGAGT GGGGAGCTGG TGAGGGTTTC CACTGCATTG TCTATTTTCA  126960
GGCAAGGTGT CTCCACTGAG TAGGCTTCAC ATTCAGAGCT CTGGGTAAGG TGGGCAGGAA  127020
GAGGGTTGCA GGCTGCCCAA AGGAGGGAGA GAAGAAGGCT GAATCCTTCA GTGACAACCT  127080
GTGAACCAGA GTCTTAGCTC TCTTTGAATA TTTTGTTCAG TATCTTTGGG TTTTGTTTTA  127140
TTTTGCCTAG GGGTAAATGC TGACTGCCTG TTCTCTGGAC AGGAATGGAG AAGATGGTGC  127200
TAGCAGGGTT GCTGTTCATA TGTAGACATT CATGCAGTCA CTCTCTTTTC AGCACACTTC  127260
TTACTTCTGC CCTGGGTTCA GTTGCTGACT CTGAGCCCAG AAACCTTCTA GGGTTCTGTT  127320
AGGTAGATTG GCTTCCACCG TCTTTGCGAC AACCACAGAA AATTCTAGAC TGTTTTCTCT  127380
TCGGGCTTCA TTAGTCAACT TGCTTCAGTC TGTCTTGCAT CTTCTAAATA TTTATAGATC  127440
TCTCTCTTTT GTTGGAGTGG CAGAAAATGC TAGTTGACCA CCCAATATTC AAATTATCCT  127500
GCCTCCTTAA TAACAGAATA TCATTGGATG TGGTGGGTAA ATAATATACC CTAACTTTCC  127560
TTGCAGAGAG GGGTGGCCAA TGAGATGGAA ATGAAAGTCA TTGGGAAAGA CTCCCAAGAC  127620
ATCTCTTTAA ACAAGACAGA CTGAAGCAAG TTGACTAATG AAGCCCAAAG CTAGCAGTTG  127680
TTTTTGTTTA TCTTTGCCTC TTTCTTCTTC TTCCTGTGGG GACAAAGGGC AGTGATATCT  127740
GGAGCTGCAG CAGCCATTTT GGCATAATGT TGGAAAAGCC AAGAGACTCT CAGAGACCGC  127800
AGCTCCAGCA GTTTTTTATT TTTTCCAAAT ATTTGCTCCA CTGCAGGAGG ATGAGATATT  127860
CGTGTTTGTT GCCTTGTGAC TGTAGGAGGA CTGCACTTCC CTGCCTTGTT GTCAAGTTTC  127920
CCCATGTGGT CTGCTTTGGC CAGTAAAACA TGAGTGGGAG AAGCTTGGTG AACCATTGCA  127980
TGTCTACCAG CTTTTTTTGCT CTCTTCCCTT TGGCATTAGA AAGGCATGTC CAGGATGGAG  128040
TTGTTCCTTC AGCCTAGATT GGGTTATGAG AAGCTAGCTG GGGGAGTCCA GTAACATATA  128100
AAGCGAGTTA GAAATAAAAC TTTGTTGTTG TAAGCTATAT ATATATATAT ATATATATAT  128160
ATATATATAT ATATATATAT AATATGTATG TAATATATAA ATACATATTA TACTTTAAGT  128220
TCTAGGGTAC ATTTGCACAA TGTGCAGGTT TATTACATAG GTATACATGT GCCATGTTGG  128280
TTTGCTGCAC CCATCAACTG CTCATTTACA TTAGGTATTT CTCCTAATGC TATCCCTCCC  128340
CAGCCCCCCA CCCCTCAACA AGCCCTAGTG TGTGATGTTC CCCTTCCTGT GTCCAAGTGT  128400
TCTCATTGTT CAATTCCCAC CTATGAGTGA GAACATGTGG TGTTTGGTTT TCTGTCCTTG  128460
TGATAGTTTG CTGAGAATAA TGGTTTCCAG CTTCATTCGT GTCCCTGCAA AGGACATGAA  128520
CTCATCCTTT TTTATGGCTG CATGGTATTC CATGGTGTAT ATGTGCCACA TTTTCTTAAT  128580
CTAGTCTATC ATTGATGGAC ATTTGGGTTG GTTCCAAGTA TTTGCTATTG TGAATAGTGC  128640
CGCAATAAAC ATATGTGTGC ATGTGTCTTT ATAGTAGCAT GATTTATAAT TCTTTGGATA  128700
TATACCCAGT AATGGGATCA CTGGGTTAAG TGGTATTTCA AGTTCTAGAT CCTTGAGGAG  128760
TCGCCACACT GTCTTCCACA GTGGTTGAAC TAATTTACAC TCCCACCATC AGTGTAAAAG  128820
CATTCCTATT CCTATGTCTC CACATCCTCT CCAGAATCTG TTGTTTCCTG ACTTTTTAAT  128880
GATTGCCATT CTAATTGGCC TGAGATGGTA CCTCATTATG GTTTTGATTT GCATTTCTCT  128940
GATGACCAGT GATGATGAGC ATTTTTTCAT GTGTCTGTTG GCTGCATAAA TGTCTTCTTT  129000
TGAGTAGTGT CTGTTCATAT TGTTTGCCCA TTTTTTGATG GGGTTGTTTG TTTTTTTTCT  129060
TGTAAATTTG TTTCAGTTCT TTGTAGATTC TGGATATTAG CCCTTTGTCA GATGGGTAGG  129120
TTGCAAAAAT TATCTCCCAT TCTGTAGGTT GCCTGTTCAC TCTGATGATA GTTTCTTTTG  129180
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FIG. 6.49

CTGTGCAGAA GCTCTTTAGT TTAATTAGAT CCCATTTATC TATTTTGGCT TTTGTTGCCA   129240

TTGCTTTTGG TGTTTTAGAC ATGAAGTCCT TGCCCATACC TATGTCCTGA ATGGTATCGC   129300

CTAGGTTTTC TTCTAGGGTT TTTATGGTTT TTAGGTCTAA CATTTAAGTC TTTAATCCAT   129360

CTTGAATTAA TTTTTGTATA AGGTGTAAGG ATGGTTTCCA GTTTCAGCTT TCTACATATG   129420

GCTGGCCAGT TTTCCCAGCA CCATTTATTA AATAGGGAAT CGTTTCCCCA TTTCTTGAGC   129480

TACAGATATT TTGAGTTTGG TTACCACAGT ATTATCTAGT GGAAGTTGAC TTATACAGTA   129540

TGTAATAGGA TAAATATAGG TGTGTAACAG AATATTAAGT GTTCGTGTTT CAAAGCTGAG   129600

GGGAAAATGT TAAAAGTGTT CACACACTCT AAAAAGAGAT TAGCTAAAAC TGCTTCATTA   129660

ACCACACTTT GGGGAAACCA GTTCTGAGAT TCTTCTCCAT TACTCTGACA GGTTGGACCC   129720

TCTGGGGAGC AGATCTCAAG ATCAAGTTAT GAGTGCAAGA GGTGTGTTGG GAAGCGATGG   129780

TTGTAAAAGA ATCCTGCAGT AGCACCAGGC ACAAGTCTGT CCAGGGAGAG GAGGACTTCT   129840

ACTCTCTACC AGCATCTCTC CTAAGTCCCC TTAGGGGACG GGGGCAAGGA AGTGCTGGGA   129900

AGGGCAGGGC ATGGTTCCTG GCTAGGACTC CACCCCCCTG GGGCCTGTAC CCACGGACCT   129960

AGGTGAAGAC AGGCACTCCT GCCTTCTCGC CCAACGGTTG CGTTTCCCAA GATCATCCTG   130020

GCCTGCCACG CCCCCATCTA CCTATTAAAC TCCCCCACCT TCCCCAAACC CTAGCAGGCA   130080

GACACACATC GGTGGAAGAA GACAGGAGCG GCTGGACATT GAAAGGACGT CGAGAGGAGC   130140

ACACCTGCAC ACCATCGACC AGCGGAACGA GGCAGAGTGT GGCTGGAGCA GTCGGAGGGA   130200

AGCCTGGGCC GCTGACTCCA GGGGAAAACC ATCTCCTTTC TGGCTCCCCC CTCTGCTGGG   130260

AGATACTTTC ACTGAATAAA ACCTTGCACT CATTCTCCAA GCCCACCTGT GATCCGATTC   130320

TTCCTGTACA CCAAGGCAAG AACCTGGGAT ACAGAAAGCC CTCTGTCCTT GTGATAAGGT   130380

AGAGGGTCTA ACTGAGCTGG TTAACACAAG CTGCCTATAG ACAGCGAAAC TGAAAGAGCA   130440

CACAATAGCA CACACTCATT GGGGCTTCAG GAGCTGTAAA TATCCACCCC TAGACGCTGC   130500

CATGGGGCGG GAGCCCCACA GCCTGCCCGT CTAGAGGTTT GAGCAGCGGG ACACTGAAGA   130560

AGAGAGCCAC ACCCTCATCG CACGTCCTGC GAGGGAGACA AGGGAACTTT TCCGGTTTCA   130620

CTTCTGCTTG GCTTGAGCTG GCACTGAAGC ACCCTTTTCC CTCCTCACTG AGGGAGCAGA   130680

GGGGAAAAGC GGTAGAACTA ACAGGCTAAC AATGCTCCTC CGAAAATATA TCGTATTTTT   130740

GGATCCCTAG AGATAGGTGA TCACGGCAGC CGCGGAGTGC ATTTGGGTCT CCTTTCAAGA   130800

AAGAACTTGC TGCTCAGCGT TGAAGAATGC AGTTGGCCAA CAGCCTCCAG CTGCTCTGTC   130860

TTCAGCATCT GCCATGGCAT CTGAGCTGAG GTCATGTTCT TCCTGGGAGG TCCCCAGCAG   130920

AAGGATCACG TGGAAGCTCC ACAAGCTCCA CAGATGTTCC AGGAGAGGAA TAGGCAGCAT   130980

TTGGAAGACA TATCCTGCCA TAACAGAGGG CATTTGCTAG TAGAGACAAC AAACAGCAAC   131040

AGCCAAGTAA ACAAACACAC AAGCACAAAG CACTTTCTCC CATTTCCCCT CATTGATCCT   131100

GTCCGGGTAG AAGCTGGGGA GGAAGTAGAA TAGGGTGAGG CGGGGTGGGG CTGGGGGGCC   131160

TACACCTTCT TCCTTCCCCC GCAGGTCCTG TCCCTGGGCC AGGCTTGAAC TAGGGGAATG   131220

GGAAAAGCTG TGAAGTGAAT GAGAATTAGG AGTTTTTATT TAGACTGGAC TTGAATTTTT   131280

TTTTTTTTTT TTTTTTTTTT GAGACAGAGC CTCGCTCTGT CACCCAGGCT GGAGTCCCGT   131340

GGCGCCATCT TGGCTCACTA CAGCCTCTGC CTCCCGGGTT CAAGCGATCC TCCCACCACA   131400

GTCTCCTGAG TAGCCGGGAT TACAGGTGCC TGCCACCATG CCCAGCTATT TTTTTTTTTT   131460

TTTGTATTTT TAGTAGAGAC AGGGCGTCAC CGTGTTGGCC AGGCTGGTCT CGAACTCCTG   131520

GCCTCAAGTG ATCTGTCCGC CTCGGCCTCC CCAAGTGCTA GGATTATAGG AGTGAGCCAC   131580

CACGCCTGGC CTGGACTTGA ATTTTTAATT CCTAAAAATG AACTACCAGT TAAAATTTAA   131640

AAATGACCAA AAAAGCTATG GGATATGCTG ATGTTTTGCT TTGGGGATAA GGAAAAGATA   131700

TCTGGTTGAG CGGCATTGAA AACAGTGTAG GGAGAGAAAA ACTCATTCCT GGCTCACCCT   131760

TTTGAGTCCC ACTATCTCAA TAATCTGATG TTATATGACA CACACACACA CACACGGAGG   131820

FIG. 6.50

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AATCCTGGAA GACTCCATAT CAAGGTGGTG ATGAAGGTGA CCAGTGGGTG ATAGGATTAT   131880
AGGTGTGTGT TTATTTATTT ATTTTAATTA CCTTTTTTTA GAGACAGGGT CTCTGTCATC   131940
CAGGCTGCAG TGCAGTGGTG TGATCATGGC TCACTGCAGT CTTGCACTCC AGGGCTCAAT   132000
CCTCCTGCCT CAGTCTCCTG AGTAGCTGGA GCTGCAGTCA TGCACCAACG TGCCCAACTA   132060
ATTTACTTTA TTTTATTTTT TATTTTTTGT TAAGATGGAA TCTCACTTTA TTGCCTAGGC   132120
TGGTCTTAAA CTCCTGGTTT CAAGCATTCC TCCTACCTCA GCCTCTCAAA GTGCTGGAAT   132180
TACTGCACTT GGCCCTATTA TATTTTTAAA AAATTTCAAT AGTTTTAGGG GTAAAAGTGG   132240
CTTTGGTTAC ATAGATGAAT TGTATAGTGA TGAAGTCTGG ATTTTTAGTG TACCCATCAC   132300
CCAAATAGTG TACATTGTAC CCAATGAGTA GTTTTTCATT CCTCACCCCC ACACTGTCCC   132360
CACTTCTGAG TCTCCTGATG TCCATTATAG CACCCTGCTT TTGCGCACTT AGAGCTTACC   132420
TCCCACTTAG AAGTGAGAAC ATGTGGTAGT TGGTTTTCCC TTCCTGAGTT ACTTCACTTA   132480
GGTCAGTGGC CTCCAATTTC ATCTGAGTTG CTGCACATAA CATGATTTCA TTCTTTTTTT   132540
GACTGAGTAG TAGTCCATCT CTCTCTCTCA CACACACACA TACACACACA CACACACACA   132600
CACACACACA CACATTTATC CACTCATCCA TTGATGGGCA CTTAGGTTGC TTCTATATCT   132660
TTGCAATTGT GAATTGTGCT CCAATAAACA TACATGTGCA AGTGCTGTTT TTTCTCCCTT   132720
TTATCCTTCT TTTCTTCCCT ATGCTTCCAT AGGTACTGAG AAAGAGTCTT TTTTATATAA   132780
TTATTTCTTT TCCTTTGGGA AGATACCCAG TAGTGGGATG GCTTGATCCA ATGGTAGATC   132840
TGTTTTTAGT TCTTTGAGAA ATCTCCATAT TATCTCCATA TTGTTTTCCA TAGAGATTGT   132900
ACTAATTTAC ATTCCCACCA ACAATGTATG TGTTCCATTT TCACTGCATC GGCACCAACA   132960
ACGGTTGTTT TTTGACTTTT TAATAATGGC CATTCTGGCT GGGGTAAGGT GGTATCTCAC   133020
TGTGGTTTTA ACTTGTATTT CCCTGATAAT TAGTGATGTT GAGCATTTAA GAAATATATT   133080
TGTTGGCCAT TTGTATATCT TCTTTTAAGA AATATCTCTT GAAGTTGTTT GCCCACTTTT   133140
TAATGTGATT ATTTGTTTTT TTTTCTTGCT GATTTGTTTG AGTTCCTTGT AGCTTCTGAA   133200
TATTAGTCCT TTGTCAGAGG TATAGTTTGC AAATACTTTC TCCCATTCTG TAGGTTGTCT   133260
CTTTACTCTG TTGGTTATTT CTTTTGCTAT GCAGAAGCTT TTTAGAATAA TTAGGTCCCA   133320
TTTACTTATT TCTGTTATTT TGTTGCATTT GTTTTTGGGG TGTTAGTCAC AAATTCTTTG   133380
CCTAGACCAA TGTCCAGAAG AGTTTTTCCT AGGTTTTCTT CTAGAATTTT TATGGTTTCA   133440
GGTCTTAGAT TTATGTCTTT AATCCATCTT GAATTAATTT TTGTATATGG TGAGAGATAG   133500
GAACCCGGTT TCATTCTTTT ACACTACATG TGGCTATCCA ATTTTCCCAG CACTGTTTAT   133560
TGAATAGGAT TTCCTTTCCC CAGTGTATGT TTTTGTTTGT TTGGCTGAAG ATCAGTTGGT   133620
TGTAGGTATT TGGTTTTATT TCTGGGTTCT CTATGCTATT CTACTTTTAT ACCGGTTCCA   133680
TGCTGTTTTG ATTACAATAG CCTCGTAGTA TAATTTGAAG TTGGGTAATG TGATGCCTCC   133740
AGATTTGCTC TTTTTTTGCT TAGGATTGCT TTGGCTATTT GGACCCCTCT TTGGTCTCAT   133800
ATAAATTTTA GGATTGGTTT TTCTAATTCT GTGAAAAATG ACATTGGTAT TTTGATAAGG   133860
GTTGCACTGA ATCTGTGGAT TGCTTTGGGT AGTATAGTCA TTTTTACAAT ATTGATTCTT   133920
CTAATCCATA AGCATGGTAT GTTTCTCCAT TTGCTTGTGT CATCTATTAT TTCTTTCATT   133980
AGTGTTTTGT AATTCTCCTT GTAGGGGTCT TTCACCTCCT TGGTTAAGTA TATTCCTATG   134040
TATTTTATTT TTATTTTTTG CAGCTATTGT AAATGGGATT GAGTTCTTGA TTTGATTTTG   134100
AGCTTGGCCA TCATTGGTGT ATAGCAGTGC TAGTGATTTG TGTACATTGA TTTTGTAACC   134160
TAACACTACT AAATTCACTT ATCAAATCTG GGAGATTTTT GAGGATTCCT TAGGATTTTC   134220
TAGGTATGAG ATCATATCAT TGGTAGAGGT AGTTTGAGTT TCTCTTTTCC AGTTTGGATG   134280
CCCTTTATTT CTTTCTCTTG CCTGATTGCT CTGACTAGGG CTTCTAGTAC TATGTTGAAT   134340
AGAAATGGTG AAAGTGGGC ATCCTTGTCT CATTCTAATT TTTAGGGGGA AATGCTTTCA   134400
ACTTTTCCCC ATTCATTTTG ATGTTGGCTG TGAGTTTGTC ATAGATGATT CTTACTATTT   134460
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FIG. 6.51

TGAGATATAT TCATTTGATG CCTAGTTTGT TGAGGGATTT TATCATAAAA GGAGGCTGGA   134520
TTTTATTGAA TGCTTTTTCT GCATCTATTA AAATGATTAC GTTTTTCATT TTTAATTCTG   134580
TTTATGTCAT GAATCACATT TATTGACTTA TGTTTATTTG TTGCTTACAT CTACTTTCTA   134640
ATTTTACTAT AATAAACATG TATAATTTTG TTATCAGAAA AGTAAATGTA AAAGTGAGTT   134700
TTAATTTTAA AACTTGGGCC TAAGTCTTCC TGCCTCCCAA GCCCATTCCC TTCCTGATAT   134760
CTGGGGCTTC CCTCCTCAAG CCTGCTCTGC AGGATAAGGG GATACAGTCC ACATGCCTGC   134820
TGCTGGTTTG GCCCATGATA ACCTCCATGG GCAATGTCTG AGCCTCTGCT GTTGAGTTTT   134880
GCTTTACACA CTCCTGGCAA GGAAAGGATG GCCAACATGG CTTGGACATG GGTTGCTGAT   134940
AATTGGTGAT GTCTCATGAC TGGTTCTGCC TGGAGGGCTT GCTGTAAGTC CCTGATAGGA   135000
GGAACATGGA CCTGCACAAG AGCAGAACTT ATCTGACACT GAAGAGGACA CTTCAAGAAC   135060
AGATTATCAA AGTCTAGCTC AGGGAGAAAT ATACTTTAGA GCAGAATGAG GAATGGCGAG   135120
GCAGCTGAGC TTAGACACAA GCAGAAGGAA ATCCATGGTG AGGGCACAGG CAAGGAAAGG   135180
GGCTGAGAGA GCATTAGTGG GGGCAGTCAG GGGCAGTGGT CAGGATGCTC GGATGCCAGC   135240
GTGAACAATC GCATCAAGAT TAAACACCAT GAGGATCGTT AGACTTCCTG TCATATGTCT   135300
CCAGGTGGTG CTCCAAATAT CCTAAACCAG ATGACAGCAC CCCTCCACCC TCTGCTGTAT   135360
AAGCACATCT GCTCTCCTAT AATCATTCCC ACATAGCAAT TTATCATTTT TATTGATTTT   135420
TCTTCATTTA ATACACGTAT AAGTGTGTCT TTTATTTTTA AAAATTTGCA TTCCTTTAAT   135480
TGCTTTGGAG ATTGTGCATT TTTCTCTCTG TTGATTTACT CTGCCAATAA ACATGTAATC   135540
CTACCATAAG CATGTTTTAC TTGTGTAATC AACCAAAATA AAAAATTTAA AAAGGAATCA   135600
CTGACTATGA ATTAGACATG TGGATAGGCA CCAGGGTTGC AGACATGGCC CACGTTCTTG   135660
CATTAACTTG CACTGTGGCT GGGGCATTGG ATGGGTACAT TAAAAGGATT AAAGTAAATAT   135720
AAGGCAGTAT TTATTAAGTG TTGAGTGAGC ACTACAGAAC CCAAGTGCTG AGGGAGTTTC   135780
ATGCAGGAAG AGATCAAGAG TAACACAGAG AAGAAGAATA GATCAATTTA GCGCATTCAT   135840
TTAAAAATTC ACCTTTTGCA TAAGGGGATG TGTCTTTTGT GGGGAGGAGG GGAGTTCCGA   135900
TTGGCAGTTT GTTCTCAGGG AGCTTGAAGA AGAGATCTTG GAGAGGAGAC GCAGAGAAAA   135960
CAAATGAAGA AAATGTCAAA ATGGAAGGGG TTGGCCCGGC TATGCATACC TTAGTTAGCT   136020
TAGGTAGAGT CTAAACTTTT ACAAGTGGTT TCAATAGGTG TGTTTGGTCT GGGTTCTTTG   136080
GGAGGTATCA TAGGAGAATG AAGGCAGGGA GGACGCTTCC AGCACCAAAA TTCAAAGGGA   136140
AATGTATTTT ACATGCATAG CATTGTTTTA CTCTCTTTCC ATTTGGAGCA TATCTTAAAA   136200
ATTCCATTTG GAGCATATCT TAAAAAACCC ATTTCTCTGA CAATGGTTCT AAAAGGGGGA   136260
AACATCCTTT GCAACAGAAT CATTCATTCT CTCATTCATC AACCACTGAT TGTGTACTAA   136320
GTGTCAGACC TGATCTCCAT CCTGCCTGGT ATGGCACTAG CTTCTGTCTT GAGACAAGCA   136380
TTGTGATAAA CCATGACCAA AAAAAGGGCA GTTTTATAAA CACAAGTCTG CCAGGCTTTC   136440
AGCAATTCTA AATTTCCTTT TGCAAGTCAG GCTGGAGTTA ATGGCTCTTT CCTGCAGCGG   136500
CGGAGATGAC AGGGCTCTCC CACAGTGCTG AGCAGGCAGT TTGAAAGCCC CACTTCCTGT   136560
CTCTGCATGG GCGAGTGTCC ACTGGAAGCC ACTGAGAGGA AGGAGGGAAA CCTCAGAAAC   136620
CGGCCCCTGC CTGGCTGCTT CACCCTAGAA AGCCCAGGCA GAGGAGGGAA AGGTGAAGTG   136680
CTGAAAAAGA ATAAAAAAGG GGGAACATGA AAAAGAGCAA GAGCAGGAAG GAGGCAGGGA   136740
CGGGAAAGGA GGGGAAGCAC GGAAACAGCC AATGTCAAGG AGAAGAAAAG ATGGCTGGTG   136800
GAAAGGAGCT TCCAGGAATT GGGACACAGC CCTGTCTTAT TGCAAAAGAT GGAAACCCTG   136860
AAGGAGAACA GGAAGGAAAA AGAAAACAAG TCCGTCTGAG CTGGCAGGGT CCACTTTCTC   136920
ATTCTACAGA TGAGGAAACA GAGGCACAGA GAGGAAGTGG CTTGCCCAAG GGGGCAGATT   136980
CTTGAAAGGA TCATCTGCAC TCTCTCTCCC TTAATGCATT CTTACCTCTT CTTTACTCGT   137040
GAGTCAGTCC TGAAGGACAA GCTGCCTGAA GTCCCACACA GATGGGCCTG GGGCAAGCAT   137100

FIG. 6.52

CAAACATCCT GGGGGCCCTG GGTGAGGTTT GCTTTTAAAT TCCAGGTCAG GGAAAGGAAG 137160
GTCTTTAAGT TGTCTGCTCT AAGCTTAGTA ATCCCCCTCA GAGTTATGGG TGCGGTGTCT 137220
GGGGTAGCCG TTGCGTCTCT GGGCAAATAC CCTGGAGAAT GCAGTGTTGG TTGTCTGAGC 137280
TGGGGACAGA GTGACAGCAT AGTTGCATGC AGAGCTGGAG GCTCCTGCAG CTGTACAGGT 137340
AAGGTGCTGA AATTCTCCAC CAACCCTTCC TCTTTGCCCC CAGCACCACG AAGATAACCC 137400
TCTTTGAATA TGTGGAAGTC TGTTCTCCAA ACTTTCTAAC ATTCTCATGT CAGTCTTAAT 137460
AGATTCAGCT CAGTTACTGC CTCCTCCAGG AAGTCCTCCT TGTCTGCAAA TCGGCTGCCC 137520
ACCATGCCGG CTCACTCATA GTTTTAACTC TGTATCTTTC TAATATGCCT TAGCCCACTC 137580
TGTCAGGATT CCAGTCAGCT TCCTTCTCCT AGACTAGGAG TTGCCTCAGG CCAGGAGGAC 137640
CAGCCTTGTT CATATCTGTA CCCTGCAAAC CTGTCAATGC CCAAACCTGC TCAGTGCTTT 137700
GGAGTATGGA ACCAGCCGTC AATGCAGGAA TGTTACACTC TAAGAGTTCC CAAAGGTAGA 137760
GAGATGAGGG ATTGGTGCTG GAAGTGGGAG GTTATTCTAA GGATGGGTAT GGCAGGAAAC 137820
ACAATTATAG TTCAGGGAGT GGAGTGTCCA GGAGTGGGAG GAGAGGAACT GGGAGAAAGA 137880
GCAGAGAGTG AAAGTGAGAG CGGGCACAAA GAAAGGGAAA AAGAGTCAGG GATCAACCAA 137940
AGTGCATGCT TCCTTTTCAG CCCTGCCAGG ATGTGCAGGG CGGCTGCTGT GGACGCGTCA 138000
AGGCTCAGCC TCAAACATGT CTTCTTCCTT GACTTTTGTC TATCATTCTA AAGCTAGGTC 138060
ATTTAAAAAG TTCTTTTGTT TTCTTTCCAC CGATACTCTG ATTTCTGACA TTCGCCAAAA 138120
AGAGGTCAAG ACCCTGGCAT ACCGCCCTAC TAAGATTAAA ATAAATATTA TCCATTGAAA 138180
CTGTTATTTT TTCCTTAACT GTTATTTGTA GAGTTAAAGA TTCCCATGAT CGCGCTGGCT 138240
CTAACATCAT TTTTGGCTCT TTTGAGATCA AATTTGCAAT TTGATGCAAA AATAGCTGTG 138300
ACGCATATGT GTCTGTATGT GTGTGGTTAG GAGATTTTTT ATCATTACAT CTTCTTTTGC 138360
CCTGCCTTTC TGCCTTTCTG TCCTTTTAAT TTGCGGGCTT TTGGCAACCA CAGCACGGGT 138420
CTGGTTTCCT AGGAGTTTCT TTTGTAGGAT CAAACCGCTA GTTGGCTCTT GGCCCTGTGA 138480
TAGGGCCCTG GGCTAACTTA TTGGGAAAAT GTTGCTGTAA CCCCTGCCCA GAGGTGCCTG 138540
TGACATGGGC CGCCATCTTC TCCTCTTCCC TTGGCTTCAG CCCCACCTAG AAACCTGAAC 138600
AAACATTTTC CTTGACATTT CATAAAGTGT CAGTGGCTCC TCATTTAGCA AAATACATCC 138660
CAGGGAAGTT CAAAAGTGAA AAAAGGCCGT AACTTCTTCT TCTTCTCAGG GACCTACAGA 138720
AAATATGTGG CACCTCGGCA GCCTGGCCTG CAGCACTCCC CTCCCCATCG GTGAGTCCTG 138780
CTACAGTGGG TCCAGGTGTC TGGACGCCCG GCACGCACGG CTCTCTGCAG ACCTCTGGAC 138840
AGTACCATGG GAGCCGCACA GTCCCTGCCT GTTCTGTCCG GCAGTTCTTG TTTCCCAGCA 138900
CCCTGTCTCA GGTGAGAGGT TCCCTCTTCT GCTGGGCTTC TCCTCCCTGC TGTGAACCCC 138960
AAATATCTGA GGCAGGTCAA TTTAGGAACC TTATTTTGCC AAAGTTGAGG ATGTACCCAT 139020
GACACGGCCT CAGGAGGTCC TGAAGACAAG TGCCCGAGGT GATCGCGGCA CAGCTTGGTT 139080
TTATACATTT ATACAGACAT CAGTCAATAT ATGTAAGATA AACATTGGTT CGGTCCCGAA 139140
AGGCCGGACA ACTCCAAGTG GAGAGGGGGC TTCCAGTTCA CAGGTAGATA AGAGACAAAA 139200
TGTTGCATTC TTTTGAGTTT CTGATTAGCT TTTCCAAAGG AGGCAATCAG ATATGCATTT 139260
ATCTCAGTGA GCAGAGGGGT GACTTGGAAT GGAATGGAAG GCAGTTCTCA GTTTAAATTT 139320
TCCCTTTAGC TTAGTGATTT TGGGGTCCCA AGATTTATTT TCCATTCACT CTGCAGACAG 139380
GGGCTTCTGT GCATCCAGGG AGCCCCTCCT CACAGAAGGA AGCAGGCCAT TAATGAGACC 139440
CAATCCAGCT TCAACCACCT GGTAACAATT AGGACATCAC TTCTCTGAGC AAGAGCTCCT 139500
GCCTGTCCAT GAGTTATCAA GACATTCCAA TTGTTCCTCC ACATCTTTGA CATGAAGACT 139560
TGAGGGGGTC AGATTTTCCA GGGGGCTTGA TGGCATGTTC TCTTCACTGT TCCCTGCCCT 139620
GGTCATCCAA GTGACCCTTG GCAGGGAAGA GGCCCCGAGT TGCAGAATCT CTGTTCTCAC 139680
AAGCCATTGC CAACCCGGAG AGTGGCTTTG CCACTATTCC TAGCATGTTG TTGGCTATTT 139740

FIG. 6.53

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CAGGAATGGG AGTATTTGAC TTTTCCCTTT GCAGTGATTG CTGCAAGGAG AGGAATTGAG   139800
AGACTCAAGT CCCTGAGATA AATATTTATC AACTATTACT GAAAGGGAGT ATGTCAAAGA   139860
AAAAATGTGG AGAAACTTCA GCTTGAACAC ATAGTTTAAA TCCAGCTTGG GTGTACTCCA   139920
GTGGGCATGG ATGTATTACT GTTTTGCAGT GCATTCTTCT ATGATCAATA CACAGAAGCA   139980
AACAGGCCAC GTGGGTAAAC AGTAATTTTC ATTTACCAGG GTGAATATGG AAGTCCTCTT   140040
GTTTCCATGT CATGATGAAG GAAAGCAAGG ACCATCTTTT GCCAAGGAAC AGTGGCTGTG   140100
GGGGAACTGA GGAGATGGAA GGACAAGGCA GTCAAAGCT TTGGAACAAC TCTTTTTTTG    140160
AGATGGAGTT TTGCTCTTGT TGTCCAGGCT GGAGTGCAAT GGCACGACCT CGGCTCACCA   140220
CAACCGCTGC CTCCCAGGTT CAAGTGATTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAT   140280
TGCAGGTATG CTCCACCATG CCTGGCTAAT TTTGTATTTT TAATAGAGAC GGGATTTCTC   140340
CACGTTGGTC AGCTGGTCTT GAACTCCCGA CCTCAGGTGA TCCACCTGCC TCGGCCTCCC   140400
AAAGTGCTGG GATTACAGGC ATGAGCCACC ATACCCGGCC CTTTTTTGGA ATAATTTTAT   140460
AGGTTTTCAA ACTATTACAC TTACCTTTTT ATATAAGAGA CAGGACATAG TCACTGAACA   140520
ATCACTCCAG ATTTTAAGTA AGTCCAGGAT GGGATGACAA TGGAACAACC ATGAAATGAA   140580
AGGAAGAATG TGTCACTGGT ATGTCCACAC GTCTCCAAAT CTCTCACCTC TGTCAGCTGC   140640
AAACAGAGCC TGAAATAAAT GTTTCCTCTG TGCACAGCCT CCACAACTTC CTCCCTCCAC   140700
GTTTCTCACT CACTCCTCTC CAGCACTTCT CTCCGGGTTC TGCTTACAAA CTTGAAACCG   140760
GCTATGCAAA AATTATAACT GTGGAAATTA TGACAGTGAA AGAGATCAGA CCTAACCGAC   140820
TCCATCTTGC TTCTAACCTT TAAGCTGTCC TTGTTCATTT TTGGGCTGAA CTAACTTTGG   140880
GAAGGAATTC AGTTCATGGT AGAACTCTGA AACAAAATTG ATAATAGCCC TTTCCTGAAA   140940
AGACCCCCTT CTTGCCTGGG GACAAGTCTG CCATTGTAGG ACTAACAAAT TAACTACAAG   141000
ATTAGAAATT AAGGTTTAGG GTTCATGCAG CCTCCAGTTC CAAGAGTCTA AACCTCCCCA   141060
AATTGCTCCT GGGGATAACA TCACTGTTGT AAAAGCTAAG ACCAGTGCTT GAGATATTTT   141120
GTAGACCCTG CTCTGGATGG ATCAGCTGAC ACCATCCAGA CTGGTAATTT GGCTCAACCA   141180
GCTCTGCCAT CCCACCCAGG AACAGAAAAA TACTCACTTC ATCACCCCAT GAGTCCATCT   141240
CTAACCTGAC CAATCAGCAC TCCCTACTTC CCAGGCCCCT ACTCGCCAAA TCTGCCTTTG   141300
GAGGCAGATA ACAACTTATC TTTAAAAACT CTGATCCCTG AATGCTCAGG AGACTGATTT   141360
GAGTAATAAT AAAACTCCGG CTCTGCATGA ATTACTCCTT TTCCATTGCA ATTCTCTTGT   141420
CTTGATAAAT TGGTTCTGTC TAGGCAGCCA GCAAGGCGAA CCCTTTGGGC GGTTACAAAC   141480
TCATCCTCTG TGGAAGAGTA GGAGTTCATG GAGAAATTGG TTGCAAATTA CAAAATTTTA   141540
TTGTAAGGTC AACTTGTCCC AGTGTCCGTC TGTGCAGCGA AGGGCCCCTG CATGGTTTAG   141600
TGATTGCAAG TTGAGCCTCT AGGGTCAGGT TGTCTAGGTT CCATCCCAG CTCATTCACT    141660
TATTATCTGT GTGTTCTTGA GCAAGCTCCT TAATCAATTG AGGCTTTGTC CTTCTGTTTG   141720
TATAATGATG AGAATAATAA CCTCCACAAT AACCTCATCA TAAGGTTGTT GTGAAGATGG   141780
ATCAGATAAT ATATATGTAG AGTGCTTATA ACAGTGCCTG GCACATAAAA AATGCTCAAA   141840
AATCTTAAGT GTTATTAATA ATAAACTGAC ATATATTTCT TGAGCAGGGT GGTGGTAAAT   141900
GGGTGTTCTT TTTATTAAGC TTTAAAGTGT GCATAGATCA TATTAATTCT TTTTATGCAT   141960
ATGATATATT GCACATGCAT GAAAATACAT GCATTAAAAA TAAATGAGCA TTTATGAGAT   142020
TTAGTTTAGC AGTCACATGT CCCAGGATTA CAAGCCAGCA ATAATGGGTT GGAAAACATT   142080
CCAACCCATT CCAACCATTG GAAAACATTC CAACCCATCA CTGGACCCAT GTGCCAAACA   142140
ATGGAACCGC CCACAGGTTC TCATTCTTGG TTAAAAAAAT ATGATTATTA CGGGAATAAT   142200
ACTGATTCCC TAAGAATTAA TATCTGAGCA AGTTTCTTTT TTTTCCTGTC TTCTTGGAAG   142260
ATCAGCAGGT TCTAGATTCA ATGGAGTCAC TAGGATTGAG CCACCAGTAT ACGCCAGTCC   142320
TCTCCAGAAC GGCCACCTGG TGGTGGGCAC TAAGGCAGTC TCAGATGAGG ACTGATTGAC   142380
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FIG. 6.54

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TTTTGTGTGA ACTCAAACTG CCAAAGTCCC TCCCTCACCT TGCAAACTTC AAAGCACAAC   142440
TTTCAAAGCA CTACTTTCTT TCTTGGCTCT CAATTCTCTG CCTAGAAAAA GGGAGGTGTT   142500
GGCAAGGATG TTTGTTTAGT TCTGGGCATC AGTCAATGGT ACCCAGATCT TGCTGAACAG   142560
AAAAGACACA GATTTGTTTC TCTGAGGCAG TTGGTAGTGC TTATTGCTTA TTGCTCTCAG   142620
GGGCTTCTGC AGCAGTAGAA GGGCCCTCTT CCCCTGCCAT GCCACACTGA GAGGAGCATC   142680
CTTGGAGTCA TGGTTGGAAT CTGTTTTTGT TATGCTAGTC CTCTTCCGCA TGCTAGCTGT   142740
TGCATTGCAG GGATATGTGT ACCTGTTTAT CTTCTCCACT AGGCTCTAAG AAGCCAGGTT   142800
TCTTAAAGGA AGGAAGCTGA TCTTGTTTAT CTTGAAGTCC TCACAGTGAC ATTGCTCAGT   142860
CAATGTTGAG TGTATGAATG AATAAACGGG AACCATCACG AAAAAGCCGA AAATACAGTG   142920
GAAAGACTGG ATCATAAAAT CTTCTAAGCA AATTTTTTTT CCTCTTACAC TCCATTTCCA   142980
AATAGATAAA GTATTTTTTA AAATCCTATC AGAATATTCT AACACACTGA GTTGACAGAA   143040
TAGAGATTTT TAAATGCAGT GTCATTTGGC CAGCCATTTG TGAGAATTTA TAAATGTTTC   143100
AGTAGGTTGA AAACACTATA AAAGCAAGGA CTATGTTCAT ACCCAACAGC TGGCACTTAG   143160
TATGAATGCT AAATGAAACA TTCTCTTCTC TTTCAAGAGT CAGTCCAACC AGTGACCCTG   143220
ACAAGAAGGA AGGCACATTT AACTCAATTT AATGAACTCT TATAGAGCAT CTCCTTCTCC   143280
AAGTGCTTTG CTAAGGATGG GGTAAAAACA TGAATAAGTC TTGGATTCTG TCCTTCAGGA   143340
ATTTTCAGTC TTTGGAGGCA GATACATTTG CACCCAACTA TTATCCTAGG CAGAGTGTGA   143400
TAAGTACGAT AATAGCAGTA AAAGCTCTAA GTTAGGCAGG AGAGGAGGAG CTCGTTAAAG   143460
CTTATGGGGC CTGGGAGGCT TTCGGCGGAG TAAACTCCAG GGGGACAGCT AGGCATCTGG   143520
CTGCTGGAAT TGGGAGGAGG ATCATTTTAA GTGGCTACAA CTCTGGGTGC ACAGGACTAG   143580
AGGGTGAGGG CCAAGATGGG AAATTGTGGC AGCCATCTTC CACACTGGGC GCCCGCCGAC   143640
CCTTGCTTCC TGGTATTCAT ATTATTGTGT AGTGTCCCCC AACATTGTAT CAGGGTTGGC   143700
CTGTGTGACC AATTGCATAT GGTGGGAATG ATGGTGTGTG ACTTCTAAGA CCAGTTCATA   143760
GAAGATGTGG CCAATTCCCT TACTGTCTTT TTTTTTGGCA GGGGAGTGCC GAGTTTCACC   143820
CTTGTCGCCC AGGCTGGAGT GCAATGGTGC GATCTCTGCT CACTGCAACC TCTGCCTCCC   143880
AGGTTCAAGT GATTCTCCTG CCTCAGCCTC CCAACTAGCT GTGATTACAG GTATGCGCCA   143940
CCATGCCTGG CTAATTTTGT ATTTTTAGTA GAGACGGGGT GAGATCAATG AGGCAGTCAA   144000
TTGGCCAGCC TGGTTTTGAA CTCCTGACCT CAGGTGATCC ACCCGCCTCG GCCTCCCAAA   144060
GTGCTGGGAT TACAGGCATG CGCCAACCGC GCCTGGCCCT TACTGTCCTT TGGATCAGCT   144120
GCTCTGGGGC TAGGTCAATC CTTCATGTGA CTGCAGCCCC AGCCAACATC TGGACTGAAA   144180
CCCATGAGAC ACCCTGAGCC AAAAAAGCCC AGCTAAGACT TCCTGCATTT CTGACCCACA   144240
GAAACTGAGA AAAGAAATGT TTTGTTGTTG CTTTAAGCCA CTGACTTCTG GGGTCATTTG   144300
TTTTGCAGAA ATAGATAGCA GATACAGAAA AGCAGGCTGG TGGAACAGTG TGGGAAACAC   144360
CTTGATTTTC AGGGAGTTGC ACTTTGTTTA TGTGCAATGG TGCACTGTTT TTAGAAAGAC   144420
ACAAAGATGA TAATACTGGT GATGGGCATA ATACGGGTTG TCAAGAGGAG TGACTGAGGC   144480
GGGGATAATT TAAGAGGCCA CAGCAGTAGT GTGGCAAGAG GTAATGAGGG AATTGAACTT   144540
GGTGGGAATG GGTGAGATCA ACGAGGCAGT CAATATGGGC AGTGAGTGTG AAGGAGCTGC   144600
GAAGGATGAT TCTTTGGTTT TGAGCTTAGG AACATGAGAG AACCAAGATC TCATTTATCC   144660
AAAGAGGAAA CACAGAAGTG AGCCCCTGTT TGGGGGCAGG GCTGGGTAGG AGGAAAAGAG   144720
TGGAGACGTC TATCTCCCCA GGAAGAGAGC CCCCTGCTTC CAGATCCCAG TGGATGGCAG   144780
GGCACTCGGC TCATTCACAG ACTGGGCTCG TTGAGAAACC TTTCCCTGGA GGGCAGGGCT   144840
GCTCTGTTTC ACAGCCCATA TCCCTCATGG CCAAGTGTTC CTCGAGTGAC AGTCTCTGCC   144900
ATCAATATTT TTAGCATGTG GTCTTTCAGA GACTAAAGAG TGGCATCCAT CTCCTGAAAC   144960
TCCTTCCCCA GCTGACAGCT GGTGACCCGT GGAGGAGGGA GCTTCAGGGA GCCTGATGGG   145020
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FIG. 6.55

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CGAGAGTCTG TTCCAATGCC AATCCATTGG AAGAGATGAA GTCAGACCCG AGTTTGATAG  145080
AAAGCCTACT TCCTCCCTTG TATCCAGCTG TGGAGACCTA CCAACATCAA TGCAAACCAG  145140
AAGCTAACAC CCAGTTCATA TATCCCAAGT GGAAGGAAGC TTCTCGTGGA ATTGTCTTAC  145200
ATGACAGTAA CATAAATCCT GAAGGTAATA CTTGGCCAGG TAATGTTAGA AAAGAACCCG  145260
AACATAGGCA TTGCTATTAT AGATCCTAGG ATAGGCCTGA GCAAAAACTG TCTGGGATTC  145320
ATAACATGCT TCGTTGCAAT CTGATAGAGG GAGTGAGATC CACTCCAAAT GGAGTCTGAT  145380
TTGGGGCAAA GCAAAGAGTA TGGAAGGAAA CTTGAGAAAG GGGGACAGCT TCTCAAATGG  145440
AGTCTGGCCA CAGCTGGGGC TGGAAAAGAG ACATGACTGC GCTTGCAGAG TGGTGAGAAT  145500
TTGCTGCTAG AATTTTTAAG TTGTGTGTTT TCATTTTTAT GATAATGTAA ACTGAGATAA  145560
GCATATTCTC TGCTATCCCA ATGAGCCCCT CCTCTAGGAG GACTACCTTG CCACCTTATC  145620
CATAAATGTG TTTATAAATT ATTTTGATGC CAGCTGGTAT TTTTTAAAAA GTGGTTTTGG  145680
ACTCACAAAA AAAACCATGA TGGATTTAAT ACATAACAAA GCATTTGTGT CAAGTGAAGG  145740
CCAAGTAACA TCTTAGCGTC CTGTGTGAGC GAAGGTGTCG TGGCAGTTCA AACAAGAATG  145800
CCGATGAAGC TGCCCAGGAT GGCCAAGGCC ACCTTGGTGT GTTTGAGGGG AATTAGAGTT  145860
TAGAAAAAAA AAAAAAGGCA CCTGACACTC TGAACTAATG TGGTTACCTG GAATTTTGGG  145920
GTTTTGAAGC TTTGCATTTA ATTTGCAGCT TATGGCCTGA AGGAAAAGAC AGGTGAAATG  145980
CATATCCTGG GATGAGTCAC CTGGAGGAGA GGGCTGGGAA GGGGCTGAGC TGCACATGCT  146040
CAGATCTTCT CCCAGGCTTA TCGACCCAGT GAGTCAAGTC TTCTTCCAAC GGGATAGAGT  146100
GTGAGAGAGA GCAGGGAACA GAAGCCAGAG TCTCTGTTAA ATTTCTCGGT ACATTTCTGT  146160
TAGAGAATGG AAGTTTCTCT ATCGTAGGAG ACCTTGAGAG CCTGGGATAG AAATTACCCC  146220
TTTGTCATGT ATTTTCCTCC CAGAAATAGC ATGGCCACTG TCACTGCTAA GCTGGAGTAT  146280
CATGAGCACA ATTTCTCTCA CTTTCTATAC CCATGCCTTT CTAGGAGATT GGTGGCTCCA  146340
TCAAAAAGGA GTTAAAAAGA AGCAGCACTA TTTTGTGGAA TACAATCATC ACCATTATCA  146400
CCATCAGCAC CACCAACCAG CACCACCATT ATCAAAAGCA TTCACCTGGT GTCTGCCTTA  146460
CAAACTGCAA ACTGCAGTAG GTATTTGTAA TAGAATGTTT CCTTTCCCCC TTGGGATCTG  146520
CAGAAAAGCT GGAGAATGTT TTGGTATCAA CACACTAGGT TGCATTGCTA ATCATGTGAT  146580
GGCCCCATGA CAGTCTCTGT TGGCTGGTGT AGTTCAGGTG GACGACTGCA GGATTTTGTT  146640
CTTGGAGCCT CAGTTCTGAC TGGGCTTGGG GTGTAAAAGG TTTGGGAGCC AGATGACAAG  146700
AGTATTTGAT GGGTAGAATA ATGGGTTCAT CCAAAAGATC ACCAGAATGG TTATTAAATA  146760
GTACAAAGGA GGAATTTACT GGTAATACCA GTTTGCAAAC AGAGAAGAGA GTCTCCAATG  146820
TGGACTGAAA GTGCTCTCTC TTTGAAGAGG GGAAGGACAG ATTGGGTTTT ATGCCTCACA  146880
GGACTGGTAC CATACATATT CAGCAGGTTT TTGGGGAAAA TCTATACATA TTTATAAGGT  146940
GAGCTGATGC CTGCATAATA GATAAACATA TATGTAACAT ACTTTTCATA TTCATTTTGG  147000
GACTGGGTTT TGGCACTAAA ATTTGTGGAA TTTGGCTCTT TATGTTAAAA GGTGAACTAG  147060
AGGACACAAA GACGGTTTGT GTGCACCCTC TATAAACTGG CTGAAACTGG CTTAAGGTCT  147120
GCAACTGCTT ATCCAAAAAG AATGTTTGTA AGGCCAGGCC TCTGTCCAGT CAGAGTTGTA  147180
GTGGTCCAGG TTGTAAATCA AAGTTTATAG CTCTTTTTGT TAGAGAGTTC AGCTGTAGGA  147240
ATTTAGAAAT TTGCCATGCC TGCCAGGCCC TGAACCTTTG ACCCATAGGT AACTTTATTT  147300
CCTTAACCTT AGGGTCAGTC TTAGTTGATA TGGGGCATCT ATTCTGGTAT CTCAGATCCT  147360
ATGGTCAAGA GAAAAGATCC TCCACAAGAG GGTCCTATGT GGCTGCAAAA ACTGCTCTGA  147420
GCTAAATCCA CTCAAAATCA CTGCAGGATG TCACTACTAG AAAATAGGGC AGGGATAGGG  147480
ATCCCCTTCC CATGCTGCCA GAAAATGCCT GATAGCTTAC CTCCCCCGGC CCTTGAGGCT  147540
CCCTTGGAAT AGGCACATGC AATCCCATCT CCACCCAATA GAGCTTGTCC TAGAGCTCAG  147600
TTTTTTCCCA TAGTTTTCCC ACCCACTTGC ACCAGAAAAT CTAATAAAGT CATGTGATTA  147660
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FIG. 6.56

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ATACAATTCA TTTTATCACG CTTCTGAAGA TTTAAGAGAG AGCGGTCACA TTGGATTCCA   147720
CAGTACCGAC CTTCTGACGA TTCTTCATTT CACCTTTATC TATTTTATT TTTATTTTAT    147780
TTTTTTTTCG AGACGGGGTC TCACTCTGTC ACCCAGGCTG GAGTGCAGTG GGGCAATTAC   147840
GGCTCACTGC AACCTCTGCC TTCTGTGCTC AAGCAATCCT CCCACCTCAG CCTCCCAAGT   147900
AGCTGGGATC ATAGGTGCAC ATCACCAAGC CTGGCTAATT TTTTGTATTT TTGGTAGAGA   147960
TGGGGTTTCA CCATGTTGCC CAGGCTGGTC TTGAACTTCT GAGCTCAAGT GATCTGCCCA   148020
CCATAGCCTC CCAAAGTGCT GGGATTACTC ACGTGAGCCA CCTCGCCTGG TCCCTTTCAC   148080
CTTTATTATC TTTGCCTTTA ACTCTAGTGC TTCCTCCCTG AATCAGTTAA GGATTGCATT   148140
TGGCTGCATT AACAGAAACC TGACTGCAGA AGCTTAACCA AATAGGGTAG TTTTTAAAGA   148200
GAGATTGCTT ACATCACGCA AATTGCACAA ATTTTAAGTG CATAGTTCAA TGAGTTTTGA   148260
CAAATGTAGA ATAACATAGC TATATAAAAC CATTCCATCA AAAAAATTTT ATCACCATAG   148320
GAAATTGTGT CCTGTCCCTT TCTTGTCAAT CCCAACTCCT CCCCACAAGG CAACCTTCAT   148380
TCTCATTTCT CTCACCATAG CTTAGTTTTA CATGTTCTA TAATACAGCA TCATATAAAT    148440
GGAATAATAC AGAATGCAAT CTTTTGTATG AAGCTTCCTT TGGCTCAATG TAATGTTTAT   148500
GAGATTCATC CATGTTATTG AATGTATCAG TAGTGTTTTC ATTTATATTT CCTAGTGTTC   148560
TATTGAATAA ATATACTACA ATTTGTTTAT CCACTTATTT GTTGATGAAC ATTTGGACCG   148620
TTGGCAATTT TTGCCTATTA TGCATAAAGC TGTTAAAAAA CATTCTTGTA CAAGTCTTTC   148680
ATTTCATATG TTTTTCTTTT TCTGAGGTAA ATAACTACAA GTAGAATTGT TGGGTAATAA   148740
ATAGGCATCC ATCTAATATT ATAAGCAACT GCACAACAGT TTTTCAACGT GGCTGACTA    148800
TTTCACTCTC CCAATAGCAA CGTATGTGTT TTCCAGCTAC TCCACATGCT CACTGGCATT   148860
TCCTGTTGCC AGTTTAAACA TTTCAGCCAT TCCAGTGGAT ATGAAATCTC TCTGGCTATA   148920
ATAATTGTAT TTCTCTGATG ACTAATTATG TCAAGCCCCT TTTCAAATGC TTATCAGCCA   148980
CTTCTATACT GTCCTCTGTG ACATGTCCGT TCAATCTTTT TGCTCATTCT TTAAAAACAT   149040
TGGGTTGTTT GTCTTTTTCT TAGTTTGTCT TTTGCTTTTC ATTTATAGGA GTACATATCT   149100
TCGGAATACA AGTCCTTTGT CAGATAAATG TATTGTGAAT AATTTTCTCC TAGTTTGTGG   149160
TTTGCCTTTT CACATTCTTA ATATCTTTTG ATGAGTGGAA ACTAACTTTC AAATTATGTT   149220
CAGTAGATTA ACTTGTTTTT GTTTTGTTTT GTTTTGTTTT TTGTTTTTAA CACTGGGTCT   149280.
CACTTGTTGC CCAGGCTGGA GTGTAGTGGT GCCATCATGG CTCACTGCAA CCTCTGCCTC   149340
CTGGACTCAA GGGATCCTCC TGCCTCAGCC TCCCAAGTAG CTGGGACCAC AAGCACGCAC   149400
CACTACACTT GGCTACTTTT TTATATTTTT GGTAGACACA GGATTCGCC ATGTTGCTCA    149460
GGCTGGTCTG GAGCTCCTGA GCTCAAGCGA TTCACCCACC TCAGCCTACC AAAGTGCTGG   149520
GATTACAGGC GTGAGCCACC ACGCCCAGTC GAGTAGATCA AGTTTTAATT TTATGGCCAG   149580
TAGAGATCTA TTTCAAGGCT CTCTATTTTG TTCTGTTGCT CTATTTATCT ACCTTTATGC   149640
CAATTTTCTT CTCTTTTGAT TCAGATAGGG TTATAATAAT AATTATTTTT TCCAGGGATT   149700
AGATGGACCA GGGCTGGTGA AGTTGTTCAA GGGAGTGATC AAGAGCCTGG CTCCTTTCAT   149760
CCTTCTGTTC CATCTCCTTT GGCTCATGGA TTTTGTTTTC CAAGTGGCAA GATGGCGCCT   149820
CCACCTTTGG TATCCTATTT TAGTTCCTGG CAGAAAGAAA GGAACAGGCT AATGGCCCTG   149880
ATGAGTCTAC CCCCTTTTAA CAGGAGAAAA TTTAAAAAAC AAAAACCATG AAACCCTTTC   149940
CCAGAGGCAA CAACCAGAAT TCCATTTATC TTTCATTGAC CAGAACAGAC CACATGGTCA   150000
CTGGTGGTGG CAATGGAGAC TGGGGAGATG AATATTTTTA AGGTGGCATA TTCCAGAAGA   150060
ACACTGTGCA CTGATTGCAT TAATGAACCC ATTAATGTGC CAAGGGGAGG TTTACCTATG   150120
AGCATGGGCA AATTAGAACC CACTCTTGGA GCTGCAGGTG AGCCAATCCC ACCTAAACAG   150180
TGTGGATGCT ACAAGATGGG GAAGTAAATT GATTCTATTC CATACCCTAA CCTCTCTCCA   150240
AGATGTATTC TTAAAATAGA AGAGGGAAGA CAGAAGAAAA CATCCAGAAT ATATTTTTAT   150300
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FIG. 6.57

TGTCTTTTAC TTCTTCAGTG CATTTTAGAT CAGTGCTTCT CAATCTGGCA AGGGGCATGC 150360
AGGAGGATGT GAGTTTTATC AGGAAAACTA CACAACCCCC CAACCACAAT GCTACCCCCA 150420
CTCCTGTGGA CCTTCTTTAA GAGAGACTCA CTATTATAGA TGGAGTTGAT ACGATTTTAA 150480
GAGAGGCCAT ATATTATTTG CTTTCTGTCT TGAAAAACTT GTGATTTTTC TGTATTGTGC 150540
TACTGCCAAA GAGAATAGAA ACCTGACTGA GGTGTCAATG TTTATGTAAC TGATTTCATG 150600
TACTTTCTGT AGTTCTACCA TTTCTGATGG TTAAAAATTT CTTGTGTGTG TGCAGTTGGG 150660
GAGTGTGTCC TCCTCCTTCT GCTCTTATAC CACACATTAG CACATCAAAA TGCTCTAATC 150720
TTTGTATGAT TATGTGGCAT GTGGTGATGC AGCCTCACAG TGGAAAAACT TCTCTTGGGC 150780
CATTGCAAAT GTAACATTTC TTTCAATCAG ATAGTGCCAT TAAGGATTTC ATTATGGCCG 150840
TCACATCCTG TGACATCTCT AAACATGCAG CATTAGGGCC TAAGTGCAGC CCTGCAGGTA 150900
GAGTTGCCAG GTTTAACAAA TAAAAATTAC ACGCTGGCCA GGCGGGGTGG CTCATGCCTG 150960
TAATCCCAGC ACTTTGGGAG GCTGAGGCAG GTGGATCATT TGAGGTCAGG AGTTCGAAAC 151020
CAGCCTGGCC AACATGGTGA AACCCCATCT CTACTAAAAA TACAAAAATT AGCTGGGCAT 151080
GGTGGCAAAT GCCTGTAATC CTAGCTACTT GCGAGGCTGA GGCAGGAGAA TCACTTGAGC 151140
CCTGGAGGCG GGGGTTGCAG TGAGCAGAGA TCACACCATT GCACTCCAGC CTGGGTGGCA 151200
GAGCGAGATT CTGTCTAAAA AACAACACCG TATTTGGGGC ATGCTGATAC TAAAAAATTA 151260
TTCATTGTTT GTCTGAAATT AAAATTTAAA TTGGGGGCCC TGTATTTTAC TGGGCAACCC 151320
ATTTGCAATA TCAGCAACAA TCTCTTATTC AGACCACTGA TTAAGTGTGC AAAATTTGAA 151380
TCTCTGAACA GTACCTATGT CCTTGATATC TTAAATTAAT GAGTGTCTTA GACACTCAAA 151440
GCAGGAGGAA GCATTATGGC AGATGTTTGA GCCCCAGAGA TGTCCATGAG CACAGCATAG 151500
AGCTCAGAGC CTTCTTTATT ATTTGCTTCA CGACAGAGCA AAGGACTGCA GCAGGTTGAC 151560
TGATATAAAA GTTTTACCAT GTCTCACAGC AGGCCTTTGC TCAAGTTTCC AGTAAGGATA 151620
TTGTATCATT TCTTGCCTGC AGTACTTGTA AATCCACTTA CACTGCCTGC TGTTGAGTCA 151680
TTTGTTTCGT CTTGAGTAGC ATGTCATCCT TGTTCCTAGA AGATAGTGAG TTTAGAGACA 151740
GTAGCCAAGC AACAGCAGAG CAGCCTCAAC CAAAACGATT TTCCATTTTG GTGGGATGAA 151800
TTGAAACACA AGCATCTTCT ATCCAGGGGA GATTTGGGGA TCATAAAGAA TCAATCTGAG 151860
CTGGTACCAC CATATTGGCT GCTGCATTTT CTAGAGTTGC CGTAACTAGT CTCACAAGCT 151920
GGGAGGCTTT ACACAACAGA CATGTATTGT CTCATAGTTC TGGATGCTAG AAATCTGGAA 151980
TCAAGGCTCC AGGGGAGAAG CTGCTCCATG GTTTTCTCTT AGCTTCTGGT GTTGCCAGCA 152040
ATCCCTGGTG TTCCTTGGCC CGCAGGCGGA TCACTCCCAT CTCTGCCTCC ATTGTCACAC 152100
GGCATTTTCC CAGTGTGCCT GACTCTGTGT TTCTTCTCAT AAGAACATCG GTCATATTGG 152160
ATTACAGGCC CGTGCTACTC CATTATGACC TCATCTTAAC TTAAACAATT ACATCTGCAG 152220
TGATCCTGTT TGCAAATAAG GTCACATTCT GAGGTTCCAG GAATTAGAAC ATAGACATAT 152280
CTTTTGGGAA CAAAATTCCA GTGATAACAG TTTCGGAGAC AGACTAGTCC TGGAGTTTGT 152340
AAGGTGAGCC AGGACCAAGG TGCCAGGATT CTCATTTTGT AAGGTCCAGG AACAAAGTGA 152400
TGTTAATAGA AAGAACATGT TTTTGTTTGT TTATTTGTTT TTGAGACAGT CTCACTCCAT 152460
CACCCAGGCT GGAATGCAGT GGTACAATCT CGGCTCACTG CCGCTGCCAT CTCCCAGGTT 152520
CAAGCGATTC TCCTGCCTCA GCCTCCTAAG TAGCTGGAAT TACAGGTGTG TCCCACCATG 152580
CCCAGCTAAT TTTTGTATAT TTGTGTGTGT GTGTGTGTGT ATATATATAC ACACACACAT 152640
ACATACATAT ATATACATAC ATATATATAT ACACACACAC ACATATATAT ATATATAAAA 152700
TATATATTTC TTTTAGTAGA GACTGGGTTT CACCATGTTG CCCAGGCTGG TCTCGAACTC 152760
CTGCGCTCAA GTGATCCACC TGTCTTGGAC TCCCTAAGTG GTGGGACTAC AGGCACAAAC 152820
CACCACGCCC AGACAGAAGG AATATGTTTC CTTCCAGTCT CACTTGACTG GCTGCTTCCC 152880
TAGATAACAA CAGAGGATGT CTGTTGCAGT TCTCATTGCT GGGGAGTCTA AACTGGAATA 152940

FIG. 6.58

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AAACACCCAC TATCTCCATC AGGCTTGCAC TAGAGCCCAG CTCTAGCTGG AGAGAAAGAA   153000
GCTAACCCGC ACAGACACAG GACTGTAGGC AGGGAGCATC CGGGGGTATT TGGGTCCTGG   153060
CTCTGATGTG CCTAAGGCCA ACTTCTCTCT GGCCATGCTG GCGTGCATGA GCTCACTAAT   153120
CTTCCTTTTT GCCTTCCATT TTCTCCAATC CTGACTTAGC AAAGGTTGGG CAAAAGAGAC   153180
TCTGTGTGAG TTCGAGCAAA GCCTGAGATG CTGGATTTTC CAAGATACGA GAAGGGGCTG   153240
GGGGCTGGGT GAACTGGTGG TGGAGGAGGG AAGGATTAAT TTCCCAAGGA GGGGAAGGGG   153300
CCAGGACATC AGGCCCCGGG GACTTTGAAG AGAGGGTCGT GGGTAGGAGG TAGATCAAGT   153360
GGAGTGACAC AAAGGTCAGG AAAGAGGAAG TGTCCACACT GTCCTTCGAC AGACTTGAGT   153420
CTATGGGACT TCCTCCCTGC ACGGTACAAG GAAATGAGTA AGTGAGATAA TGTTGTAACT   153480
TCTGGCCCTC TGACATTGCA CTGCCCCGAT GTCACAGTTG GAAACTGTAC CTGCCCCCAT   153540
CCTTGTCTGG GGTGTGTTTG GTCTGGGGAG GGCTGGTGAA GCAAGAGGTA CTCAGAAAAA   153600
GGACAGAAAT TGCTTCCTAT TATCTGGGCA TTTGGAGGTG AAGGGGTCAC AGCTCTGGCA   153660
AAGATGGGGT TGAAAGGGCC CGGACTCCAG GGAGGGGCAG CTCTGCATGG CCTGATTCCT   153720
GCACCCCACC TTTGCCCCCT CACACCTCCT CTCATCTCCC GTTTTTGAAG AGGAGGACCC   153780
TGTCACATCT GGACAATTCT GCAAGAACTC TGTAGAACTG ACTTCACTGT GAACCAGGCT   153840
CCAGAAGTCA ACAGAAACAA AAATGCTCAC ATTTAATCAC GATGCTCCCT GGCATACACA   153900
GAAGACTCTG AAAACTTCTG AATTTGGGAA ATCCTTTGGC ACCTTGGGGC ACATTGGGAA   153960
CATAAGCCAT CAGTGCTGGT GTGTGTGTGT GTGCGCGCAC ACGCGCATGT GTGTGCATCT   154020
TCTACCATGC CTCCTACAAA TTTGACCTGG GCCCAGGGCC ATGTTCGGTG GTTTTTAAGA   154080
ACCGAGGCTC CCAGAAGCAG TATTGGGCAG CTAGAGTGGC CCCAGGATCT ATATCAAACT   154140
CTACCTGTTT CTGAACCAAA TTTCTTCTAG AATTTTATTC CATAAATCTG AATTATGGTG   154200
TCAGACTCCT AGCATACACT AAAGGAACTC TCTGCCTTGC ATTAAATAAC AGGAGTTACC   154260
CCTGGAGGTA ACTCCTAGCC CTGGCTCTTT AGAGAACAGA TGCCGAATAG GCATTAGGGG   154320
ATGTGATGGA TGTGCTAACT TTCAAAAAAA AAAAAAAAAA AAGGCCTGAG CTGAGTGCTC   154380
AGAGATTCAC AAAAAGCTGA CAGCATCTCT CTGTTCCATT GGAAGCTGGG TGATCCTTTC   154440
TACTCTTTCC TGAGAAAGGC AGTTGGGCAG GAAAAAGCTG TATCTCTGTC CTCACTGAGA   154500
GGGTTTCCCA GTCTGAGGGT GAAGGATCAG GAGAGGGAGA CCTGACGGGT CGATGTGGGG   154560
CATCATCCAC TTGAGTGAGA ACCAGAGGGA TCCCGTCATT GCCCAGGGCA GATGCTCCAT   154620
TTTGGGGGGC ATCATTCATT CTTTCCTGTT CTCCCTGCAT TCCTCTGGCT CCTGCCCAGG   154680
AGAGGTGGCC GCTGGCAAGA GAGCTTGGTG GAGGTGGGAG GTGGGAGGTG GGGGGTGGGG   154740
GGTGGGGAGT TCTTGAGCCA GGACCTAGCG CATAGTCTCC AGCCTGCTGA TGGCTGTCTT   154800
GGATGCTTCA AAGGGGAGAA GATCCTAGAT GTGGGAAACA TTGGTGGGCG TTCTGCTGGG   154860
GCATCTGTAG CCTCTGAGAA GGCTACCAGT CTCTCCTAAG CTTACGCCGT CACACCCTGG   154920
GCACTTGTTG AATGACTTTA CTTAGCTTAC AGCCTCTGGT TCCTGTTGGG AAACTTAGGG   154980
CTTGCCACAG TGTTCATTTT CCTTTGCGGG CAACTCCGTT CCTGGCACTT ATCATATTAC   155040
CCACTGTACT CCCCGCTTAG AGCTGTGTCA AGGTTCTGAG AATCTATCCC TTGGCTTGGA   155100
AGGGGTCATC TCTCTGGCCA GATCATTTCC TGATAGGTCC TGAGGCACCA CAACACATAG   155160
GAGGCTTGTC CTCTCTCTGG GGTTCACTGC CTTGCTCCTT CTCCAGGTCA ATATGTGACC   155220
TTGGACCGGT TGCTTGAGTC CCCTGGTCAT TCAGAAACAA TTGGGTTTCC CTGGCTTTGG   155280
AGCCTGGCAG CCTGGCTTTG AGAACCGGGC TTTAACTTGT CACATGACTA TGGCCAAGTT   155340
CCTGGGGCTC TCCAAGCTTC ACTTCCTCTG TAAAAAGGGC AATAATATAA TACCTGTCTT   155400
ATTGGGTTTT GTCCATGTTA GATGAGACAT TGGGTACAAA GCACTTGGTC CCGTGCCTGG   155460
CACATTTACT GCACTTAATG TATGATAGTT TTCTTATTAT CTAATAAAC AATATGGCTT    155520
TGGGAGTATA GTTCTGCCAC ATTGCAGTGG CCAGAGTGAA GGTGGTGAGT GCCTTCTGGG   155580
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FIG. 6.59

GCCCTGGGAG TCAAGGTTAT CCGCATGCCC TTTCTTGCTT GCTCCTCAGT GTGGCTGCCT 155640
CTATGTCCAC ACCATGCAGA TGCAACAGGT AGTTTGAACC TCTGAGGCCC ACAGTGGGAT 155700
GGGGAGGCAG GGACATCACT TATGGGGTGG GAAGTCACCC ATTCCCCAGG AAATGGCCCC 155760
AGCTGCCTTT TCCATGACTC CTCTTGAAAC CCTGTGGAGG CCACATTCGT GTTGGGGCGG 155820
TCTTTCCCAT GAGGATATGT TCAGATGCCG AGGCATTTTG AAAAGCCCTC CATAGAGTTT 155880
CCTTTCATAA CACATGATCA TCCCCTTGGG CTTCTGGTTT TTTTTCTTTC AGGACCTTAT 155940
TTTCAGGCAA GTGGCCTTTG ACCTCTAAGG CTGTCCTTTC CTAGCTACCG AATCCAGCAT 156000
TCAAAGTGAT GGAAATATGT ATATATAGTA ATAGTAAAAT ATCAGCACTT AATGGCCTGA 156060
TAAGAATGTC ACTGCAATGC TGAGTTTGGA CCAACATTTG CCTGCTCCTG CCATTGAGCC 156120
CGGGCTCCCC TCCAGAGCTG AGCTGCTGCA AGGGATCTGA GTAACTAGGG CTGTGTCAGA 156180
GTGGCGATGA CAGCCACCAC ATGCTAAGGA AGAGATCCCC AAGGACAAGG AGAATCCCAC 156240
GTGGAGCTAC TTGCTTCTTT GTCAGTCTTG TTTTTCTTAT TTCACAACCT TCTAAACAC 156300
AATCTCTCAA CCTCTATTGT TAGCTTGCAT TTTTCAATCA TGAGCACAGC TTTACCTGGC 156360
TCCATGCTTT GATTGACTCT ACCTGCCAAC ACTGCAACAA CAGGGAAAGG GACACCGGCC 156420
TCATACCATT AGATGGTGTG TAGCCTGGGC ATGAGGATAA TTAAAAACTC CCAAGGGGAT 156480
TTTAACATGT AACACAGTTT GGAAACCATT GATGTAAGAT CTTCTTACTC AACATGTGCT 156540
CCAAGGAGCT GTTGTATCAG CTTATCAGAA ATGTAGATCA GGCCGCACTT GGACCTGTAG 156600
AATCAGAATC TGCATTTTAT CAGATTCCGA CATTATTTGT ATGAACATTA GCTTTTGAGA 156660
AGTGTTGCTT TAAGAGACTA AGGGGGTCAA TCTACCTCAC TTTGCAGCTC TGTGTTCCTT 156720
AGTCATTGGC TAAAATATCA GCCCCCCTGC AATGAGCCAT CCTCCCTTGT ATAGTCAGTG 156780
ATGGCCTGTG AACCTTTAGC CAACTGGAAG TGGGAGGGGA CACAGTCCAC AAAACACTAT 156840
CCTGACTTTT GACACCAACT ACAAGTCAAG GGGTTCCCCA AACCACCCTG AGTTGTGATA 156900
ATTCGCTGGG AGATCTGACA GAACTCACTG AAGGTTGTTA TACTCATGGT TGTGATCTCT 156960
TATAGGGAGG GAATACAGAT TAAAATCAGC CAAAGGAAGA AGCACACAGC ACAGAGTCCA 157020
GGACAGTGCC TGACATGGAG CCCCTACGGT CCTCTCCCGT GGAGTCACGG ACAGCGCCAC 157080
TCTCCTGGCA TTGATGTGTG ACAACACACA GGGAGTGTTC CCCACCAGGG AAGCCTTGGT 157140
GTCCAGGGTC TTTACTGTGG CTCTGTCACA TGAGCACAGC TGACTGCCCA TGCGGCCGAT 157200
CTGTTCCCAG ACTCTCCACC GCTACACATC ACTCACAGTC CCTGCTCTAA ATCACACACC 157260
ATGACCCAAT GTCCCCGGGC AAATGAAAAC ACCTCTAGCA GGCAGGACGT TCCAAAGCCT 157320
TAGAGATCAC CTCTCAGAAG CTGAGGGCAG AAGCCAGACC TCTTTTTGGG CAGGGTTAAA 157380
TTCTTTATTA CTGTTTTTGA AAAAACTCCC AAATTGAGTT TTTCCTCTTC ACTTACAGCA 157440
GCATAACAAC AATCATCAAT GCAGAAGACT TCTGCGAGCA AAGGTGTGGG GGAAAACCCC 157500
AAGCAGTGGA CACTAGCTGG TGTCCTCCAA TTTGATTCTG ATGCTGTCTA CTGGGAGATA 157560
GTGTCAGATC CTCAAGCCTA AACCCTCCTT CTCCCAGTCA GAGGGCTGGC CTTTGGAACT 157620
TCTGACCAAT CCACTTCAAG TTGAGGTTCC AACCACTCCG CTCTTTGGGT TTGGTTGATT 157680
TGCTAGAGTG GCTCACAGAA CTCAGGGAAA CACAGCTACC AGTTTATTGC GAAGGACATT 157740
TTAAAGGATA AAAGTAGGCA GATAAAGAGA TGCATAGGGC GAGGTGTGGA AAGGTCCCTA 157800
GTGCAGGAGC TTCTGTCCAT GTGGAGCGGG GGTGCACCAC CCTCTCAGTA CATGAATGAG 157860
TTCTCCTTCA CCTGCCTATC AGCCTCTACA TGTTCAGCTC CCCAACCCAG TCCTCTTGGG 157920
TTTTTATGGA AGCTTCAAGA CACCCACATT CTTTCCCCAG AGTATAGGGC AAGACCTTCT 157980
CTGGGGAGGG TTTTAAGACC CACAGTCAGA AAGGTGGGGT GGGGTCAAGA TTAGAGTCCT 158040
GCCTTGACGG GCAGGTGAAA GGGGTAGGGG GAGTAGGTGA GAAAAATTCT GTTTATTTTT 158100
TCTTTTTTTT TTTGAGACGG AGTTTCACTC TTGTTGCCCA GGGTGGAGTG CAATGGCACA 158160
ATCTCAGCTC ACTGCAACCT CCGCCTCCCA GGTTTAAGCG ATTCTCCTGC CTCAGCCTCC 158220

FIG. 6.60

CGAGTAGCTG GGATTACAGG CGTGTGCCAC CATGCCTGGC TAATTTTGTA TTTTTAATAG 158280
AGACAGGGTT TCTCCATGTT GGTCAGGCTG GTCTCAAACT CCTGACCTCA GGTGATCCAC 158340
TTGCCTCAGC CTCCCAAAGT GCTGGGATCA CAGGTGTGAG CCACTGCATC TGGCCAAAAG 158400
ATTCTGTTTT TGAGGCCTGC CTCTGAGGTC TAACACACTC AACATTATAA CAAGACTGTA 158460
GTAAGGGCTA TGGGAGTTAT GAGCCAGGAA CTGTGGATGA AAACCTATCA CAGATATGCA 158520
TATATATATA TATATATATA TATGCATATC TATAATAACT CCACAACTAC ACACTGCCTT 158580
ATTGCTCAGT TCTTCTCTCC ATGTCTCTGA CCCACCCTTG CCCCCTTCCT CCATCCTTTT 158640
CTCCATTGCA TACCCATCCA CTGTGCCCTT TGGAATGCTC ACACCATGAA CTGCAAACTC 158700
TCGTGTGGCT TCAGCCTCTT CTCTGAAAGT TCCTCTCACC TATTACTTTC TCTGGAACCT 158760
GCCATCCCTG CCACCTTCTC AAAAAAGGCC TTTTATTCTC TTCATTCCAC AAAGCTCAGT 158820
GTCAAAACAT GGGGTTTACA CTGGAAGCTG AGGTCACATC AGTAGCCGGG ATCAGGGTCG 158880
CCCTAGCTGC CCAATGCAGC TCCCAGGCCT CCTGTAAAAC CTTGACCTTT GAGGTCATGA 158940
CAGCCCTCTC CTGCTATGCT CATAGCTGAC CACTGAACTC CTGGACACTC CCTCCCCCAA 159000
GTTCACAGAG AATGTGGGCA CATGCCTTAC AGTCTTCCCT TGATCCAAAC TACTGCCTTC 159060
ATCTTGAGTG ACAGCAGCAT CTTTTGGATG TCTTGGCCTG TCTAGCTTTA TTTTTTTGTG 159120
TTCTGCCATC AAGTTGCTAC TTCTGTTGCC ATCGTGCCTG TCAGCGCAGT GCAGGCTGTG 159180
GTGAAATCCC ACGAACTCAG GCATCACACT GACCGGGTCT GAGTCCTGTC TCAGTTGTCA 159240
GCTAGTTGTG CAATGAAGGG AAAGGGACCT ACACTTTCCA AGCCTCAATT CACTCATCTA 159300
TGGCATGGTG ACAATAATGG AGGTTGATTT AAAGTCCTTT GTAAGAATTA AGAGTTATAA 159360
TAGACATAAA GTGCTGTATC TGGTATACCT AGAAAACATT CCATAAAGT TAGTAATTGT 159420
TGGTCATGTA ATGATGACTC TCTAGGCTAG GATTTCAGCT TCATTGCATG CACATGGTGC 159480
ACTCACAGGG CGTGACCTCT CTCTGTCTCA GTAACCTCAT CTGAGGACCG GGATAATCAT 159540
ACCGCTTCAA AGGGATGTCA TAAAGATTAA ATAATATGTG TAAGGCTGCT TGCATTTAGC 159600
TGCATTCAAC AAATATTTCT GTATCTTTCT CCTCATTTCT CCTTACTTTC TTGCTTATTA 159660
TCTGCTCTAG GTATAGATTT CAGAGAACTA AGCTTGTTAC AATCCTTCAT AAAATAACCA 159720
GGTTGGTTAG GGCATTTCCA AGAGTCAATA CTGTTTAGTG ACTATTCTCT GTTTAATCTA 159780
TTTTGATTGT CCAGGGTCAT CTTTTGCTAT GTCATAGGTT GTTGGCTTCT TCTAGAGAAG 159840
TGAGACGATG GACAAGTTCC AAGTGAGTGA GGCGACTGGT CAGGATATTC CGCTGAAAAA 159900
CTCATGTCAG TTCTAATTCG TGATTGTAAT TCAATCACAG CCTGAGAACA GTAGGACTGT 159960
AGTTCAAATG CTCTGTTCCC TTTTTTTTTT CCCAGAGGAT AATTTTTTTT TTTCTTTGAG 160020
ATGGAGTCTT GCTCTGTCAC TAGGCTGGAG TGCAGTGGCG TGATCTCGGC TCACTGCAAC 160080
CTCCGCCTCC TGGGTTCAAG CAATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGACTACA 160140
GGCACATGCC ACCACGCCCA GATAATTTTC GTATTTTTAG TAGAGACGGG GTTTCCCCTT 160200
GTTGGCCAGG GTGGTCTTGA TCTCTTGACC TCATGATCCG CCCACCTCGG CCTCCCAAAG 160260
TGCTGGGATT ACAGGCGTGA GCCACCGCGC CCGGCCTCTA GAGGATAATT TTTAAATGTG 160320
CTTTTGCATT TGGAAAATGT GATTGGCATT TTTTTCTAAT TTTCTAATAT GATACGCTGT 160380
CGGATGCTAT GGATTACTTA AACCCTCTGG CTACCTAGAA AGATCTTTAA GTGGTTCTCA 160440
ACAAGCTTCA TACGCAATGT AAATTGTATT ATCTCTCAGG ATGTGTGAGA ACATCTGTTT 160500
TTCTTCTAAT GCAGTAAACA TATAAGGGTC TCTTGGGATA TCTTTTAAAT AGACTTAATA 160560
CAACATTCAG GAATGATAAC AAAATATAAT CACAGTTGTA AGGGAATGTG AGCATTTCAT 160620
ATTAATAACA TTGGAACCTT ATGTTTAATA CAGTGTTAAA AGTTGACAAA CATGTAGGAG 160680
TCAGAAAATT CAATTAAAAT TATCACAGTA ATATGAATTT AGCCACATCC TGTGTTAGTT 160740
ATGAAATCCA TTTAACACCA CAAACAGTAA TATTTTTAGC CAGTTTATTC AAAAGGAAAA 160800
CAGGAACTAA ACCACTTTCA TGCAATATAT ACTCTGTTAA TGTGGTCAGG CTAATTTTGC 160860

FIG. 6.61

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TGGGGGAAGG AACTTAACTT TTGAATATTT GAATGCCCAG TCATTTAATC TGAATATCCT  160920
ATTTCCTTGC ATGTTGCAAA ATTTTTGTCA ATAAAAGGCA GAAAAGAAA TCTCTTCTCC  160980
ATGCTCATCC CTAAGAGAAT GGGTTGTCTG TACCCTGAGA GCATTTTATG GAGGGGACAA  161040
CCACTTTTCT AATTTTCCTT CCCACTTCTC TGTGGGCACA AATGCTCTTT GGTTGAAAGA  161100
GTTGTAATTC AGTCCCAAGA TGAGGTGTGG TTACTGCATC CCTAACCTAT ATCTGGGGAC  161160
CCCACAGCCA CACACATGGG GGAAATGGAG CTTGTCATTC AGTTCTCCAG CCATTGCACA  161220
GGGTTCATGG ACTCTTCGTT GATCCCACCC CACGCTTCTT CTCTCTGCTA GCCGAACACA  161280
CTTCTCTCTT CTTTATCAGG AGGCCATAGG AGAAGGGCAT TCATTTTTAA TACACATACA  161340
TCTGCATCAA GTCTAATTTT GCCATGTCTC AATCCAACTG TCAAATGGGT TGTTTGGGGG  161400
CTATGGTGCT TATCAAACAT TTACTCAAGA ATAGCCAAAA TTAGCCAAGC AAGGAGAACT  161460
TCAGCAACGT TCCCAAATGG CCCCAACCAA GTACTGTAAG ACTGAGGATA GCTAAAGGGT  161520
CTTGAGAGGG ACTTCTCAGG CAGTGGCCCC GACATTTATC TGTTTTTTTA AGTGAGAAAT  161580
CTGAGTACCA TTCTTGACTC CTCTTCCTTA CCCCCAACCC CTCACTAAGC CTTGTGCTAC  161640
TATTTAGTAA ACAGACCCTC AATGCACAAA CTTCTGTCTA AGGCCATGGC CACCACCCTA  161700
GTCTAATCCA CCATCTCTTC TCTGGAACAG ACCCCAGCTG CTCTCCCTGT CTCTGTGCTG  161760
GTCTCTCAAT CCATGCTCCA CACTGCAGCC AGAGTGCTCT ACAATGCAAA TCCATTTGTG  161820
AGACTCCTCC TCTTAAAATC CTCAAGTGGC TTCTCTTTGC CCCCAGGATC ATTTTGAAAC  161880
TCCTTAATGG AAGAGGCATG GCCCTTTGGG ATGTGGTTCC CCAACCCCTC CCACATCATC  161940
TTTTCAATCA GATTTCCCAC TAAATGGAAA TTTTTTCAGG TCCTCAACTT TATGGTGACT  ·162000
TTCTCTTGCT CAGGATCTTT GAACATACTG TTTCTTCTTT CCTTTTGTAT TTGCCAAGAC  162060
AACACTTCCT CTGGTAAGAT TTTCCTGACA TCCTCTATAA AAAAAGATTG AGATAGTTGA  162120
CTACCCAAAA TGTTTCCCAT TCATTCCAAG CTCTATTCAA GGCAGTAAAG TGCCCGGCTG  162180
ACAGATTGCA TTCCTCATCT TTTCTGAAGC TAGCAATGGC CATGCAACAG CATTCTGGCC  162240
AATAAGATAG AAGTCGAAGT TGAAGGGTGG GATTTCCAAG AAAGCTCGTT GAAGACATAA  162300
TTCCTCATTT CACTTCTTAC TCTTTCTCTT TCCTGCTTCC TAAAATGCGG TGCAGATGGC  162360
AGACACTTCA AAGCTGTCTC AGGCAATCAG GTGATGTTAA GGCAGAAACC AGCTTTATGA  162420
TGGGTAGAAC AGGAAGAAAG AAGGCACCTA TGTTCTTGTT CACCTTGAAC CACACCAGCA  162480
CTGCCTTGCC TACCCCTGGA ATTCCTTTAA TGAGAGGCAA ATGAGAGCTT ACGTGTTTAA  162540
GCCATTGCTA TTTTATTTTT TTTTGTTTAT ATGCAAAAGA ACTTAATCCT AACTGATATT  162600
AACACTAACT GGGTCTATTG CTTGGTACCA AGCCAATGCA TGACACATGG TATATATGCT  162660
CAGTAAGTAT TTGTTGAATG AGTGAGGCAA TGAAAGAACA TAGAGGATAT ATATAACAGT  162720
CCTCCTGCCC AGATGTCATC TGATCCTCTT TAGGATCTGG GCCCATAAAA CTGTATCTGA  162780
TATAGTTTGA ATATTTGTTC CCTACAAATC TCATGTTGAC ATTTTATCCC TAATATTGGA  162840
GGCAGGGCCT AGTAGGAGGT GTTTTGGTCA TAGTGATAAA TGGCTTGGTG CCGTTCTCAC  162900
AGTAACGAGT GAGTTTTTAT TCTAGTGGTT CCTGCAAGAA CTGATTGTTA AAAGAGCTTG  162960
GATCCTTCCA CCCCTCTCTC ACTCTTGCTT CCTCTCTCTC ACCTTGTAAT CTCTACAAGC  163020
TCTTCACCTC CCCTTCTCCT TTTGCCATAA GTGGAAGATT TCTGAGGCCT CACCAGAAGC  163080
AGATGTTGGT TCCATGCTTC TTGTACAGCC TGCAGAACCA TGAGCCAAAT CAACTTCTTT  163140
TCTTTATAAT TATCCAGTCT CAGGTATTCC TTTATAGCAA CACAAATGGA CTAAGACAGT  163200
TTCTAATGCT ATGGTTCCTT TAGTAGGTCA GTGTAAAACC CTGGATCACT·CCTGTAACAA  163260
ATTACTTGGA ACTCTTCTCA CCATACATAT TTAAAAATAG TTGCCATGTT GAAAATCCTA  163320
TAAGATCATA TTTTATTTCA AATCCAACAA CTCATTGCTA AGGAGATACA AGAAGCAGAA  163380
AATACAGAGA GACTAATGTG TTGATGATTT TTGTGAGGGA CATAAGGTCT GTGTCTAGAT  163440
TCATTTTTTT GCATGTGGAT GTCCAGTTGT TCCAGCACCA TTTGTTGAAA AGACTATCTT  163500
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FIG. 6.62

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TGCTCCACTG TATTGCTTTT TCTCCTTTGT CATAGATATC TGGTCACCTT ACCTTAGAGT  163560
CACAGATGAA TGGTCCTATT ACTTAACTAC TGAAAATACA GGCCAAAGCA AACAGAGGAA  163620
TAAGGGATAT ATAATAAAGT ATTTGTGTAC TTGACTTGGC TCTAAAGGAA GCATTGCGTG  163680
TCTGTGTAAA AAGAATGGGT GAGAGTTTTC CACCATTCAA TATTTCTAAT CTTTCTGAAA  163740
TACAAAGCCA GGACATCCTC TAATCCATAC ATTCCATAGT TTGGTTAATA TAAATTCCTT  163800
TATTAAATCC TTATTAAATA AAGTTATTTA TGTTTCTATG AAACTCATTT TAACTCCTAA  163860
GTGAAAAATA CTACTGAGCT AACTAAACAT CAAACATTTT TAATTTTTTA AATTTTTTTA  163920
GAGACAGGGT CTTGCTATGT TGCCCAGGCT GGCTTTGAAC TCCTGTGCTC AAGCGATCCT  163980
CCAAACTCAG CCTCCCGAGT AGCTGGGACT ACAGGTGCAT GCCACTGTGC TCAGCTAAAC  164040
ATTTTTTTGA AATGCTCTTT TAAAATCAAT TTTATTGAAG TATAAGTTAC ATACCATAAA  164100
AGTACTCATT TTGAGTGTAC AGATTGACAA GTTCTGACAA ATGTGAACAA CCATGTAACC  164160
ATCACCAAAA ATAAAGATAT GAGACATTTC CATTACCCCA AAAAGTTCCC GTGTCCCTCT  164220
CCAGTCAATA TCCAGCCCTA GCCCCAGCTC CAGGCAACCA CCAATCTGCT TTCTGTTGCT  164280
ATAAATTGTA CTTATCTTTT CTAGTGTTTC ATACAAATGG AATCATACAG CATTTACTCT  164340
TTTGTGTCTG TCTTCTTCTG CTCAGTGTAA TGTTTTTGAG ATTCATCTAT GTTCTGTGCC  164400
TCAGTAGTTT GTTCTTTTTA TTACTGGATA ATTCCATTAT AAGAATATAC CACAATTTGT  164460
TTATCCATTT ACTGCCTGAT GGGCATTTGG TTGTTTCCAG CTTTGAACTA TTTTGAATCC  164520
TAAAAGACTG CCAGTTTTGA ATGAGACCCC AGAACAATGA ATGTAGGCTC TGTATACAAG  164580
TTCAGGCTGC TGGGCAACTT AGGCCTTAAG ACACAACTCT GCCACTTAGG CCTTAAGACA   164640
CAACTGACAT GATGGTGCTT AAAGTGGCTG TGATGGAAAA GGAGGCTGTT TGGAGCCTTT  164700
GGAGTGCCTT TATAGGTGAA CCCCAGCATA GCACCTAATG ATTTGGAGCA AAGCTGTGTC  164760
ATTCCCCAAA GATAACTATT CGCCTTTTGA GAAACATCTT CTAGCTACTA TCAATAATAA  164820
ACACAGAATG CATCACCATG GGCCACCGTG TTGTCTTTTG ACCTGAGTTT CCATTGTGAA  164880
CAAGAGTCAT TTGATCCAAG GCAGAAAGTT GGGTGCACAC AGCAGTGTTC CATCATCAAA  164940
TGGAATATGA GATTGGGCCC AAGTAGGTCC TGCAGACACA AATAAGTTGC AAGAGCAAGT  165000
AGTACAGGCG CTTGGCCTGG CCAGTACTGT TGCCAAGTTG ACTGCTTCCC CTCAGTCTGC  165060
ATCTGTGGCT TCATGGGGAG TTTCCTATGA CCACTTGATG GAGGAAAAAA CAAATTGGAG  165120
CATAGTTTAT AGTGCTGGTA CTACCCAAAG TGGCTAGCTG AGGCACTACA TCTCCACTCT  165180
GGGGTGCCCG TGAAGGACAG TGCCAAAGGA AAACCCCCTC AGTGAGCAGA ACTTGGAGCA  165240
ATACAAGTGG GTGTTCATTT TACCTAGAAG AGAAGATGTC CGTGAGTTAC AGATCTACAC  165300
AAAATCACAG AGAGTGGTTA ATCGTTTAGT CTGATGGTCA GGGACTTCCA AGAGACATGA  165360
TTAGAAAACT GGTGACAAGG AGTCCTGGGG AAGAGGCATA TGGATACCTC TGAACACACA  165420
CAAAACATGA GAATATGTAT CCCATATGAA TGTTAACCAA AGAGCAGCCA CAACAGAAGA  165480
GGATTTTAAA ATCAGCTGAA TAAGATGATT CATTCTGACA GCATCAGCTA GTCTCTTTCC  165540
CCAGCCACTG TTGCCCAGTG GGCTTACATA TATCATGGCC ATGGGGGCAG GGCTATGTAT  165600
GGACACAGCA ACATGAATTT CCACTCATCA AGGCCAATTT GGCTCCAGCC ATTGCTGAGT  165660
GCTCAGCCTG CCAAGATAGA AATCTACGCC AATATGGCAC CATTCCCTGG GCTAGAAAAC  165720
CAACTGGTGG AAGGTTGATT ACATTGGACC ATTTCCATCA TGGAAGGGGC AGTGCTTTGT  165780
CTTCCCTGGA ATAGACATTT ACTCTGGATA TGGATGTGCC TTCCCTGACT ACTACAATGC  165840
TCTGCCAAAC CTACCATCCA TGGGCTTAAT TTTATTTGTT ATAAAATTTC AACCACCATT  165900
GCTTCTGACC AAGGAAGTAA TCTTACAGCA AAGGAAGTAC AGATATGAGC TTCTGATCAT  165960
GGGCTTCACT GGCCTCACAG TGAAGCAGGT GGCCAGATTA GAACAGTGGA ATGGATTTTA  166020
AAGGCTCAGT TACAGCACCA GCTGGGTAGC AACACCCTGC TGGCCTGGGG TTATGTCCTG  166080
CAGGATGCTT TAAGTCAGTG ACCAATATAT GATGCTATTT CTCCCATTGT CAGGATTCAT  166140
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FIG. 6.63

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GGGTCCAAGA ATCATGGGGT CAAAATGGGA GTGGCTTTTC TCACTATCAC CCTGGTGTTC   166200
GGGTAGTAAT TTTTCCTTCC CATTCCTGTA ACTTTGGGCT CTGCTATTGC AGAAATCTTA   166260
GCTCCTGTGG GGGGAATGCT TCCATCAGGG AATACAATGG TGGTTCCACT AAACTGACAG   166320
CTGAGTTTGC CATCTCCTCG TGCCAGTGAA TACACAAGCA AGGAAGGGGG TTCCTTTCTC   166380
ACCTAGGGTG ACTGATCCTA ATTACCAAGG AGAAATTGGA CTGCCACTTC ACAATGAGGG   166440
TGAGGAGTAT GTACTCTATG TGTCTGTGAT TAATGTCAAT AGAAAGTGAC ACCAACCTAG   166500
TACACAGAGG ACTGATCATG GTCCAGGCCC TTCAGGAATG AAGATTTGAG TCACCAGGCA   166560
AGGAACTTGG ACTCACTGAG GAGGGCATAT TCCAAGGAGA ATATTTTATC TATGTCCATC   166620
TATGTCCATC TATATTCCAT CTGTGTTCCC CTTGGAATTC CTATTCATGA ACATGGGGAA   166680
TTCCAAGGGG AATATAGAAT GAGTAGTGGA AGGTAGTTAT AAATGTAAGT CAAAAACCAC   166740
ACAACCAATT TGAGAAATGA GGAAGGTAAT AGTGTTGAAT ATGTCTTCTT TATCTTGATA   166800
TAAATGTATT TGTGCATATA TTAACCAGTT TATTTATTTA TTATTATTTT TTGAGATGAG   166860
CTCTCGCCAT GTTGCCCAGG CTGGTCTTGA ACTCCTGGGC TCAACTGATT CTACCATTTA   166920
GTCCTCCGAG TAGCTGGGAC TACAGGCATG CACCACCATA CCCAGCTGAC CAGTTTTTTC   166980
CTATTCCTCT ACTTAATTTC TCTACTATAC AACATAATAT GTGTTAATGG TAGTTAACTT   167040
TATATCTCAG TATTAAGTCA CAAGATATCA AAAAGGGAAT GCGACTTAGT TACAAGCAGA   167100
ATGAATATCA CTCAAAGATG AATAAAGAGA AGAGGGTTAG TGCATTTTCT GTTGGATGAG   167160
AGAAAGTTTC ATTGTTAGGC AGAAGCATGA TTTTGCCTTT TTTTTTTTTT TCCAAGGTCT   167220
CACTCTGTGG CCCAGGCTGC AGTGCAGTGG TGCGATCTTG GCTCACTACA ACCTCTGCCT   167280
CCCGGGTTCA AGTGATTCTC CAGCCTCAGC CTCCAGAGTA GCTGGGATTA TAGGTGCGCC   167340
AGGTTAATTT TTGTATTTTT AGTAGAGAAG GTGTTTCTCC ATGTTGGCCA GGCTGGTCTT   167400
GAACTCCTGG CCTCAAGTGA CCCACCTGCT TTGACCTCCC AAAGTGCTAG GATTACAGGT   167460
GTGAGCCACT GTGCACAGTC ACCACGGTCT TTTTGGGAGG CAACTTTAGC ATGGTTAAGA   167520
GGTGCGAATG GATGTTAAGC TAACACCAGG TAAGCCCTGG TAGATGTGTA TTGTGTCAGT   167580
GGGCCTACGC TGGAGCCATG TTTCCCCAAA TTCACTTTTC CTATGTACCT CTGGATTAGT   167640
GTGGGCCACT GGAGACATTT CACATGAGAT GAGGAAGGTG GGAGTGAAGG AGCAGCATCT   167700
TTTTACACTA AGCAGGTCGG GGAGGGCATG TGGCTCTGTC TCACATTGTT GGGAATCTGT   167760
CCATCATCTG GTTGGCTTAG GTCAGTGGGT GAGTTCACAG CTGTTCCAGC TTCTGCTGGA   167820
AACTCCTTCG GTTTCTCTGA CTGCTCCGTG ATGAGGGCAT CAGATTCTCC TGCAGAAAGC   167880
CCCAGTGTTG AAGTTGGGGC TTCATGTTGG TGAGTGATAG TTACGGGTTC TAGCCCAACC   167940
TGTGGTTTCT TGCAAATTTC AGTGTCAGCT CAGTCTTGCG GGTTTTGGGT TGTCCTTGCT   168000
TCCCACACTT CATGCCTTTC TTTCCCTCCT GACAGTCTGC CCTTTAGATT TTAGGATTCA   168060
GCACCAGCCA CAGAAACAGC AACCTCACTG TTAAGGGTTG AATTGTATCT CCCCAAAAGG   168120
TAGGTTGAGG CCCTACCTGC CAGGACTTCA GAATGTAACC TCATCTGGGA ATAGCATCAT   168180
TGCAAATATA ATTAATTAAG ATGAGGGCAT ACTGGCTCAG GATGGGCTCC TAATTCAATA   168240
CAACTAATGT CCTTCTATGA CAGCCACAGG AAGACAGAAA CGCCAAGGGA GAACACCATA   168300
TGCTGATGGA GGCAGTGGCA GCTGCCAGCC AAGGATTATA ACCAGAAGTC AGGAAAAAGC   168360
AAGAAGGAAT CCTCCCTTAG TGATTTTACA GGGAGCATAG CCCTGCTGAC ACCTTGATTT   168420
TGGACTTTTA TTCCCCAAAA CTGTAAAACA ATACACTTCT GTTGTTTTAA GCCACTCAGT   168480
TTGTGCTACT TTGTTATGGC AACTCCAGAA AACAAAAATA CACTCAGACT GTTTAATCAA   168540
CCTCCATAAT TGCATAAGGT CTAATCCCTA TAATAAATCC CTTAAAAATG TCTGTGTATA   168600
TATATTTAAA AATATAAAAT ATCTTCTAGT GGTTCTGCAT CTCTGGTCAA TCCCTGACTG   168660
ATACAGAATA TGTATTTTCA TTTCTAATGA TGAAATACCT GAATGAAATT TCTAGGACAT   168720
ATGGTAAGTG TATGTTTAGC TTTTAAGAAA CTGCCAACTT GGGGGAATTG CTTGAGGCCA   168780
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FIG. 6.64

GGAGTTCAAA CAGCCTGGGT AACAGTGATA CCCTGTCTGT ACAAAATAAA AAATATTAGC   168840
AGCGTGTGGT GGTGTGTGTC TGTAGTCCCA GCTACTCAGG AGGCTGAGGT GGGAGATTCA   168900
CCTGAGCCCA GATCTTTGAA GTTATAGTGA GCTATGATCA CGCCACTGCA CTCTAGCCTG   168960
GGTGACAGAG TGAGAAAGCT GGTCTCTAAA AAACAAACAA ACAAAAAAGA AACTGTCAAA   169020
CTCTTCCCAA CATGTTGCCA TTTTTACATT TACCATTTTA CATTCTTACC AGCAATGATT   169080
GATAGTTCCA GTTGCTCCAT ACCCTTGCTG ACCATTCCAA TAGATGTATT GTGTTATCTC   169140
ATTGTAGTTC TAATTTGTAT TTCCCTAGTG ATTAATGATG TTTAACATCT TTTCATGCAC   169200
CTATTGGCTA TATGTATATC TTCTTTAGCA AAATATATGT TGTTATTTGA AGAGCGGAAG   169260
TTTTACATTT TGATGAAGTC TAATTTATTG ATTTTTTTTT TCTTAGATGG CTCATGCTTT   169320
TTGTGTTATC TAAAAAAAAT TTGCCTTCTT CATGGTCACA AAGACTTTCT CCTATGTTTT   169380
CTTTTGGAAG CTTTATATTT TTAGTTTTTA TGTTTATGTT TAAGACCCAT TTCTAGTTAC   169440
AATTTGTGTG ATTTTTTGGA AGGGTCAAGG TTCATTTTCT TTTCCATAAG AATGTACAGT   169500
TGTTCTAGCA CCCTTGTTAA AAAGACTTTC CTTTCCCCAT TGAACTACTT TGTCAAAAAT   169560
CAACTGAGCA TATATGGGCA TCATGAATTT TAATCCTGTT AGAACTGAAT GTTCCCAAGG   169620
CAGGCCATGC CCATGACTGA CCTCCTTTCC TTGGATTGCC TACAAAACAG ATAAAGCTAA   169680
GTCTGGAGCA AAGAAATCCA TGTCTAACCT GTATTTTTTT TTTTTTTTTT TTAGATGGGG   169740
TCTCGCTCTG TCACCCAGGC TGGAGTGCAG TGGCGTGATC CCAGCTCACT GCAATCTCTG   169800
CCTCCTGGGT TCAAGTGATT CTCCTGCCTC AGCCTCCCGA GGGGCTGGGA TTGTAGGCGT   169860
GCACCACTAT GCCCATCTAA TTTTTGTATT TTTAGTAGAG ATAGGGTTTT GCCATTTTGG   169920
CCAGACTGTC TTGAACTCCT GACCTCAGGT GATCTGCCTG CCTCGGCCTC CCACAGTTTT   169980
GTGATTATAG GCATGAGCCA CCGTGCCCGG CCTTAACCTT TGTTTTCTTA CACAACACAC   170040
TACGTGATGT TTTCCACATG CATGGGTCAT TTGCTTCATT TACGTACAAA TGCATAAGCA   170100
ATATACTGTG TGGTGTGAGT TTGTGATGGG AAAAGGAAGA AGTTTTGCGG ATACTACACT   170160
GGCTTCCTGC TATCTGTCTG TGTGAATGGC TATGGACTTT GTCTTCTATT TGTTCGCTTA   170220
GCGCAGATAT GATCAGCTTA CAACTTAAGA TTCTAGAGAA AGAGGGTCAT ATCTGTAAAG   170280
CACTCTGAGC ATGTGTGAAG TTTAATCAAT AGCATATGAG GTTACAGCAA ATTCACTATC   170340
TTTGTTTCTT CAGCTATAGA ATGGCATGAG GATTCATCTC AATTTAGTTC AATTCTGTTC   170400
AGAACCATGA GCTAGCTGTT CATGGAAGGA AAGCCCACCT GATTGTGGCC AGGGAAGGAG   170460
AAACAACACT TTAACCAGGT TGATTGGTT CTCACAGACA CCATTGGCAT GTGACATCTG   170520
GAACAGACCA TGCCTGGTCT CTGTTCGTAT CACTTACTAT TCAGCTCAAT ATTGGTCTGA   170580
ATATTCTTTA GACTGACTGA AATGAAAAGG AACTGTTGTG TAACCATCCA TAATTCCAGC   170640
CTGTAGACCT GGGCTGTATC TCTATGCCCT GCCTGGCACA GACCCCACCT CCTGCTCCTT   170700
CTCCCTCACC ACCAGTCAAT CCTTGTCCTA ATGAACAGGG AGGGCAACCC TGAATGGGGA   170760
GTGGAGGGAA GAGATGTCAT GAGATGGCAA CGTGCACCCT GAAGTGAGGA TGAAGGCTAT   170820
GTGAATGTTG TAGGCTGACA GCCGGGCATA GTGGCCCCGT TGCCATGGCG ATGGAGGCAT   170880
GTTGATGCGA AGTGTCTGCA CAGCTCCTAG GATTTTTAAC AGCAGCTGGG CAGAGCCTCG   170940
GCGTCCCTGA ATTGTTGCCC CCCTGAGTCA CTGCTTGGCC CCAGCTGTCC TGATCTCTGT   171000
TGACAAATGG TTGTCCTTCA CAGTCAAACT ACTAACAGTA CTCTAATTAA TGAATGTGCT   171060
AATTATTCTT GCCTACTCCC AGCATATTTG TCTAACTAAC CTGTCACACA CAGATCAGTG   171120
CAGCATATGC ATAATTACGG AGAGCGCTGG GAGCAGGGGA TGGGTGGGAG AGGGGTGGGC   171180
TCGCAGCCCT GTCGCTGTGG GATATTTCTT GTAAAGTTAC CTTTGCTAAC GGTCAGATGT   171240
CGTGGGGATA TGTTATTTCC CGTGAAGTGT ATATGTCTTC CTTTCTTTCC TTTCTAAGAA   171300
TCTCTCTTCA GGGCTGAGGG GCCATTGCTC AGTGCTTTAG CCTGTGAGGG GATTGCCAGG   171360
TACAAATGCA GAAGGACCAG GGAGCCCAGG TTCTGAAGAC GATTCCGGTA GCAGCACGTA   171420

FIG. 6.65

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GGGTGATTAA AACTCCAGAC TTTAAAGCCA GACCGGCCTG GGCTTGAACC CTTGTTCTGC   171480
TCCTTGCTAT GTGGGTCTTT GCCTTGACCA CATTTTTTTT TTTTTTTTAA GACAGGATCT   171540
CCCTCTCTTG CCCAGGCTGT AATGCAGTGT TGCGATCACA GCTCACTGAA GCCTCCATCT   171600
CTACAGCCTC AAGCGATCCT CCTGCCTCAG CCCCGAGTAG CTGGGACTAC AGGTCTGTGC   171660
CACCACGTCC AGCTAATTTA CTTTTGTAGA GTTGGGGGTC TTGCTATGTT GCCCAGGCTG   171720
TTCTCCAACT CCTGGACTCA AGCCATCCTC TAGCCTCGGC CTTCCAAAGT GCTGGGACTA   171780
TAGGCGTGAG CCACGGTGCC AGGCCCTTGA CCACATTTTT AACCCCTCTG AACCTCAGTT   171840
TCACTTTCTG GGCAATGGGA GGGGGGTAAT TTGTCCCTCA GAGGGTTGCA CTGAGGGGCA   171900
AATGTGAGGC TCTGGGTACA ATGCCCAGTA CAGACTAGGT CCCCACGACA CAGCCGCTCA   171960
GCGGCTCCGG ATTCTGGGCT GCTCTGGACT GCGGCCAGGC GGTCTTCTGC GGGAATCCGG   172020
GCAGGCAGGG CGGGCTGCGC TCCCCTCCCC GGCTCTCCCG GTGCCCCTTG TCTTTTTGTT   172080
CTGTCTCAGC AGCTCTCTAT TAAGATGAAT GGCATTTCCA AAGGCTTCAC CTCTGATAAG   172140
TGTTCCTCTG CAGCTGCAGC CAGAATCTTA ATGTGCGCGC TGTAATTTAA TGGCCGTCTC   172200
GGCTATTAAC ACGCTCTTCT CGGGTGAAGT GGACTCCCTC CATCCCCGGG CCTCTGCACG   172260
TGCTCTGCGC GCTGGCTGGG GGTGACTCCA AGGAGCTCAG AGCGGGGTGC CCGGCACCTC   172320
TCGCCAGGCG CCTTTCGACC TTCTAAAGCG CGAATGGCTG GACTTTTCTC CCATGTGTGG   172380
GGCCCCAGAA GGTGTGGGGC CCCAGAAGGT GTGGGGTCCC TGCGTTCCAC GGAGCCCGGA   172440
AGGTTTCCAG TGATGGTGGG GGCTGACCAC GTTGGTCCCC GTGGGTGCTG TTTTCATGTG   172500
CCGGCAGATT GGGATGAGTT TAAAAGACAG AAGCGTGTAG GATAGAGAAA CTTCTTTAAA   172560
AACTGGAAAT TTTAATCTGG GGATTATAAC TATTGGACAG TCAAGTGCAA GAGTGAATAC   172620
ACTTCTCACT CCCTCCTCCC AATTTTTATT TGCGGGATTA GTCAGTCCCC CTCTGCCACA   172680
TGATAATTGT GAGAACTACC AGGGTCTTCA TTCTCCTGCC ATCTGGTTGA CCTCTCCAAG   172740
AATGGACACC CGGGCAGCCT GGGCCAATGA GGCTGTCCTA AGAGTTTAGA TGAGAGAAGT   172800
CAGTCTTTGA CAGGTGATGG AAGCTGTAAA ATGTAAAACT CCACAGTTGG TGAAGATGTC   172860
TCCAGGAAAC AGGTCTGCAG AGAGAATACG TTTGACATGC TAAGAGAAGC TGAGAGAGAG   172920
CGAGAGGAGA GATTGGAAGA AAGACAGAGA CAGAGGTAGA GAGAAGGGAA AGAGAGAGAG   172980
AAAGGGACAG AAGAGAGAGA AAAAGAGGG GGCCGGGCGC GGTGGCTCAC GCCTGTAATC   173040
TCAGCACTTT GGGAGGCCGA GGCGGGCAGA TCACGAGGTC AGGAGATCGA GACCATCCCG   173100
GCTAACACGG TGAAACCCCC GTCTCTACTA AAAAATATAA AAAAAATTAG CCAGGCGTGG   173160
TGGTGGGTGC CTGTAGTCCC AGCTACTGAG GAGGCTGAGA CAGGAGAATG GCGTGAACCC   173220
GGGAGGCAGA GCTTGCAGTG AGCTGAGATC GCGCCACTGC ACTCCAGCCT GGGCAACAGA   173280
GCAAGACTCC GTCTCAAAAA AAAAAAAAA AAAGAGAGGA AGGGCGGGAG AGAGAGAGAG   173340
AGAAAGCTCT CTAGCTCCAA GGCCTAACCA CATCTCTGTT CTTTTCAACT TCAGCTGTCA   173400
GATTTTTAGA CTCTTTGAGT GAATAAATTC TCCTTTTTGC TTAAACTAGT TTGAGCTAAG   173460
TTTCTATTGC TTGCAACTGG AATACTTTGT AAGAGGACTG GCCTTCATTT CTGATGCATT   173520
GTCACTAAGA TGTAAGTGTT AGAAGAGCTA ACGCTTTATG GGGTTCAAAC TCCTTGGCTA   173580
CCAAAACCTA AACATCCCCT GAAACTTACC AAACTGCAGG TATGAATTGG ATCTCACTAA   173640
GGTGAATATA CAAATCTTGC AAGTGCTGAG CCCTAACCAA TCTTGTAATA ACTCTGTGGT   173700
AGTTAATTTT ATGTCAAATT GATTGAGCTA AAAAATGCCC AGGTAGCTGG TAAAATGTTT   173760
TTTTCTGGGT GTGTTAGGGA GGGTGTTTCT GAAAGAGATC AGCACTGGAA TCAGCGGACT   173820
AAGTAAAGAA TTCCCACCCT CACCAATATG GTGGGTGTCA TCAATCCACT GAGGGCCTGA   173880
ATAGAACAAA AAGCGGGCAG AAGGGCAAAT TCCCTCTTCT TCTTGAGCTG GGCCATCCAT   173940
CTTCTCCTGC CCTTGGACAC TGGAGCCCCT TGTTCTCCAG CTTTTGGATT CAGACTGGGT   174000
CTTGCACCAT TGCCCTCCAT CTTCTCCTGC CCTTGGACAC TGGAGCCCCT TGTTCTCCAG   174060
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FIG. 6.66

CTTTTGGATT CAGACTGGGT CTTGCACCAT TGCCCTCCTT GATGCTCAGG CCTTTGAATG 174120
CAGACTGGTC TCCACCAGCA GCTTTTCTGA GTCTCCAGCT TGCAGATGGC AAACCATGAA 174180
ACTTCATGGT GTCCATGAGC ATGTGAACCA ATTTCTATTA TAAATCTGCA ATATATATAT 174240
ATGAGGAGAC TTATTTATAT ATTGGTTCAG TTTCTCTGGA GAGCCTTGGC TAATATAAAG 174300
TCTATACTCT ACAAAGTGCC CTAGGTACTC AGGGAGTACC CAAGTGTGTC ATGACCAGCC 174360
CGACAGCCCT GGCTGCTGGC TTCCCCGCAC ACAACTCTGC ACGCTGCCTT CATCAGCCTT 174420
TCTCTCTCAG CTGAACCGAG GGCATTGAAG CGGGCCTCTG GCACTGTACC TATGAGGGAG 174480
CAATATCTTC CCCTACACTG ACCTCTTCCG TGCCGAGATG CAGCCCTCCC TGCTGCCACT 174540
AGTTACAGTG GTCCATGTTC CCTTTCAAAG TGAAGTTTTG ATAAAAGCAC CTCTTAACCA 174600
ATGCCAAATA GCTAAGTCTG GGACAAAGAT TGCAGGTATT TTGCATTTTC CATGTAACCT 174660
CAGAGGGATT GCCATTCACA CTGATCTGAG CTGCAGAATA CCAGGCAGCC ACCTCACCCA 174720
CCCAGCAGGT CCACTCTTAT ACTTTCTCAG AAAGCACAGC CACTCTACTC TTATTCAGTT 174780
GAAAAGAATT TCCAGGAAGG TGTTTCTGCG ATTGCCTCAG AAAAGTCAGT TCCCTTTGGG 174840
AATTTCCCTT AGGGATCATC TGTAACTCCA TTTCTGCCTT TTACCTGAAT TCTTTGGTTT 174900
GGTTTGAATT CTTTGGTTTA ATTTATGAAT TCCCTTTATT ACTTTTCTCT GAAGAAATGG 174960
AGATATCAGC TGTCCCTCCC CACTGCCATT TATTCCTTCC TTCATTCAAA CCTTATGTGG 175020
CTGCTACTTA CCGTGTGTTA AGTGTTCACT TTTTTTCTTG GAATTCAAAA AAAGAAGGAC 175080
AGTATTTGGG GCACAGATCT TTTGGTGTTC TATACATTTT TTTAAAGTTT CATTTTACAT 175140
TTGTGTGTGC GTGTGTGTGT GTGTGTGAGA CAGTCTTGCT CTGTTGCCCA GGCTGGAGTG 175200
CAGTGGCATA ATCATTGGCT CACTGTAGCC TCAAAGTCCT GGGCCCAAGC AATCTTCCCA 175260
CCTCAGCCAC CCAAAATGCT GGGGTTACAG GTTTATGCCA CTCTGTCTGA CCTGAAAGTT 175320
TTGGGTTTAC TTTCCCTTCT TTCTCTTTGC TGAAGTCAGA GATGATGGCA GCTTCCAGAT 175380
TCTCTGGTGC CTGTGCTGGG CTCGTGCTGG TCATGGTCTT GGGTCCAGGA TTCATTCTGG 175440
AGACTCTCAG GGAAGTTTCC CATGACAAGG AAATGTAGGA GAGTGTGCTG GCTTTGCGTG 175500
CTCCTCTGCC AAGCCCTGCT TCTCCTGGTG GGACACACTG AACCACAGCC AGGGCATTTT 175560
GGTGGTTAGT TAAAAAAAAA AAAAAAAAAA AAAAAAGGAA GAAGAAGGCA CTGTGTAATT 175620
GTGCCGGGGA TCTTCAGAAA TTGTAATGAT GAAAGAGTGC AAGCTCTCAC TTCCCCTTCC 175680
TGTACAGGGC AGGTTGTGCA GCTGGAGGCA GAGCAGTCCT CTCTGGGGAG CCTGAAGCAA 175740
ACATGGATCA AGAAACTGTA GGCAATGTTG TCCTGTTGGC CATCGTCACC CTCATCAGCG 175800
TGGTCCAGAA TGGTAAGGAA AGCCCTTCAC TCAGGGAAGA ACAGAAGGGG AGATTTTCTT 175860
TGATGGTTGT TTGGAAGTCA GGCTTAAACA ATTGTGTCTG TGTGTGCGCA TGCACAAACA 175920
CTTTTACCTT ATCTTTATTT TCTTCTTTTT ATTTGAATGT ATAGGGTTGT GTGTATTTCT 175980
GTGTAAATTT GGGGTTTTCC TCCTCTTAGT CTTTCACTTT TGTGGTGATT ACCAGTCCCA 176040
TTTTTAGAGC CAGGGCTGCA ACTTGAAGGT TTTGCTAAAA CCCTCACCGA AGTGTCTATG 176100
ATCAGCATTT TAACTATTAA TTAATGTGGC CAGGCAAGGG GTGGAAGGTG AGAAGACTAG 176160
AAAGGGAACA TGATATACAC ATTTACTCAG ATACTGGGCT TTTCTAACAT CTGCAGTGCA 176220
ATTGAAGTTA CCAGTCATCT GCAGTCTAAA AAGAAAGTGA TTTTGGGAGG TGCGTAGAAA 176280
AAATCATCTT ATTATTTTTC CTCTATATTA CTTTTTTCTT TTTTTCTCCT GAAGAAACTT 176340
TTTTTTTTGG TGATACCTTC TTTTTCTCTA GCACGTATAA TTTTGGAAGC ATTTTTCATA 176400
TGCAGTGTAT ACTTCAGAAA GAGAGAGAGA GAGAGGAAAA TTGTCCTGTT CAGCGTTTGC 176460
ATTTCCATTA TTCCTGCTAT TAGTTAAAAA CAACAACAAC AACAAAAAAC AAGCAGGATA 176520
CCTAGATCTG GAAAAGGGAG AATTGTGTAG AGCTGTCTTC CTAAAGTTCT GAGTTAGGGC 176580
TGCCTCAGAC CACTTTCATA ACTATCTCCA GTGGCTTTGT GTTTTATATT TATTAAGATA 176640
GAGAAAAAAA GAGTAATTAC TAAGGGCAGC TGCTGTAGCT TTATGGTGAT TACTGAACAT 176700

FIG. 6.67

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TGACATGCTG TCACGTTTTT GGAACTTTGA GTATTTAATC ACTTTGGGAT ATTCTATTTT   176760
CCCCCATCTT GAGTGTGGAC AGATGCTGGT GATGTAGCCT TCTGGGCACA GAGCAAGCCT   176820
CCCCCTCAGC CTCTGCACCA GAAAGGCTCA GCTTCACACA CTCCAAGTAT GTTTTCTACA   176880
AGAACTACAC TTTGTGGCTT TCTGACCCAA ACATTTTTAT ACTAAATTAC ACACAACAAA   176940
GTTGTAGCTC AGAGAGGGAA CAAATGGCTT ATTTAGGCCA CCATTTTCTT GAGCCATTAT   177000
GATTTCACAC AGGGCTCCCT TGGCCCTGTA AATTGGCAAG GATTCCATTA TTCAACCCGC   177060
ATACATGTAC AGAGACCCTG CTCTGGCCCA GATAGTATTC TGGGTACAGG CGGATAGAGC   177120
AGGAAACAAA ACAGCTACAG TGATGGACAG GTCAGCCTGC AGCAATGCCT GCAGTCTCTG   177180
CAAAGGTAGC TGTATGGGTG GGCAGGTGGC TAGCACTTAT TCAGCTCTGG AAGGATCTCC   177240
CCTCTGGCCT CTCCCCTGAC ACCCATCAAT AAAACTGAGG AGCATCGGTG GACAGGGGAC   177300
CTTGTGCCCC CTCCCTGCCT GTGCAGTTGG GGCTGAACCC AGCTACGAAG TTTGAGCTCA   177360
CTCTCTCCAG CTCCCTCTCA ATTCAGAGCT GAACTGTGGG AAGCTTCAGA GCTCTCTGTT   177420
TCAAGGACAG GTTCTCCTCA CCTCTCCTAA TGGAGGTGCA CCAGGGAACT GGCCCTGCTC   177480
TGCCCAGGGC TTTCTCCTGG ACTTTGCCAT CATGGTCTAG CAAACCCTGT TCAGATTGAG   177540
GTGAGTGGTG AGATTTCGAA TTCTTTTTGA CAGATAGGAT TAAGTCTTCT TCTGTGGGAC   177600
AAGTGGGAGG TAGAGGTAAG ATTAAAGATG GCCAAATGTC TGAGTCCTGA CAGCCACAAT   177660
ATGGAGATCT AGACTTTTTA CAGACCACAG GGCACAGGGG CCTCACTAAC AGAGTTCCCG   177720
GAAGTGATGA GTGTGCTGGG GGCTTCCTGG TTGAAGAGAC ACTAGAATGG ACCAGCTGGG   177780
AGCTAATTTT TTGGGCTGGA GTGTGATGGC CTGCACATCA CTGCCTCTGT CCCTCCATTG   177840
TCACAGCTGC CCCTTAGGAG CCAGCTGAGG CAATTTGTGG TCAGAGTGAC TTTGCACAGT   177900
TGTCCTGCCT GTGTTCAGGA AGGGAGTTTC TGTGGTCCCT TTGAAACCAC AGAAGAGCCC   177960
CTCGTATAGC TCTCAATGGA GGGGGCAAAA CATTCAAATA ACTCAGGAGA TAACACAACT   178020
ATTTGTTTTT AACTGTGAGT TTTTAGGCAA TCACAAAGAT CCAGATGTAT GTCCAAGCCT   178080
CTCTTTGCAA TTCTAATTAA CCTCAATGTT GCAACCATAG ACCTACCTTA CAGAGTTCAA   178140
AAAAATATGC AAAAACCCTG CCTTTCTTCT TCCTCATACC CCAAAATGCC ATTCTGAACA   178200
TTTCCTGTTA GTTAAAAAAA GATTTCCATG GTGTTACCAG GCACTGTACA CAGTCTGTGT   178260
CCCAAGACAA GGAGGTACAG TTCCACATGC GCCCATGACT GGGTTGGGCT CTGCACTCTC   178320
TCTATACTTT GAGAGCCTGA TTTTCTGTGA TTGGGCAGAG CTGGCCCACC TGGTGCAATG   178380
TCCTCCTCTG CCTTTCAAAC ATGTTTTAGT CATCAAGATC TTCAAATTTG TAACCCTTTC   178440
CAGCTTGATC CAGCAGAATG CAGATTTGGA AAAACAGAAC GAGTTTAAAA TACATGATTC   178500
TAAGAAACCT GGACCAGAAC TATCAAAACT TGGTTTCCCA GAGAATATAG CAAATGGGCT   178560
CATTGGCCAA TACTATGACA TTGGCTTTTG AGAAAAGAAA GGCTTTATTG CAAGGCTGGC   178620
CAGCAAGGAG ACAGGAGTTG GGCTCAAATC TGTCTCCCCA GTTGGGGCT TAGGGCAAGT    178680
TTTAATTACA CAGACGCATT TCTTATGAGT AGCAGGCAGA GAGCCTCCAA CTTCTTCTGC   178740
CTAGGTACCA GCAGCTTAGA CATGATGCAA ACCTGGGAAG CACATACTGT ATTTGGAGAA   178800
AGTGATTGGG AAGAAATGTG AGCTGAGGGG AGGGGCTCAG TGCCCCTGAG CTACACTTAG   178860
TGATGGCAGA GGAAGGATGT CCTCCCGCAG GAGGCTGTTC CACATCTGCT CTGGTTGTAG   178920
GGGGAGCTGG CAGGCATTAG CAGCGGCCTC TTTCCCCCAA GAGAGGCAGC CTCCTCCAAG   178980
TTTTGGCGAC ATTATGGCCC TGCAATCATA AGGGTTTGTG AGCATAGTGC TAAGGAGGGA   179040
AATGGAGCTG CTGTTACTAG TTCCACCCCA ACACACACAC ACACACTCAC AAGAAACCTC   179100
ACAAGCACCG TATTGGAAGA CTTTGCCATC CAACCTGGGA TTTGACAGGC TCTAGAAGCA   179160
GAATCATAGA CTCATGAAGT TCCCCCAAAG CAGGAATCTT CCTTACAGTA ACCCCCAACC   179220
ACCCCCCTCC ACCGCCTCCA CCGGCTGCTT CTTCCTGAAC ACTGCAGTGT TTGGAAAACT   179280
CACAAACTTC CAAGCTTGCC TTTCCTATTG TTGCATGGAT TGAAAGCTTG CGTTGTGTGA   179340
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FIG. 6.68

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AGAATGGCGC TTCCTGCTGT GCTTAGTTTT ATCTCATATA ATCTTTGCAC CATTTAATCC  179400
TTGCACTCAC CCACTCATGC AACTGCCTTT GCAGAGACTG GAGGGGCCGC TGTAGGCTGA  179460
CCTTTCCTTC ACTGTACCTA TTTTGTTCCC TGCTTTATTC CCCTGCACCC AGGACACTGC  179520
CTGGCACAAA GACAGGTCTT TATAAGTGTA TGCAAGTGAA TAAAGATATA TATATTATTA  179580
TTGTTATTTT TGAGACAGTT TCACTCTGTC ACCCAGGCTG GAGTGCAGTA GCGCAATCTC  179640
AGCTGACTGC AACCTCTGCC TCCCAGGCTC AAGTGATTCT CATGTCTCAG CCTCCTGAGT  179700
AGCTAGGACT ACAAGCATGT GCCACCACGC CCAGCTAATT TTTGTATTTT TAGTAAGGAC  179760
AGGGTTTCAC CATGTTGGCC AGGTTGGCCT CCAACTCCTG ACCTCAAGTC ATCCTCCTGC  179820
CTCGACCTCC CAAAGTGCTG GGATTACAGG CATGAAACCA GCCTAGAAAT ACATACTATT  179880
ATTTATTCTT GTTTTACAGA TAAGCAAAGT GAGTCATGGA GAATTTGGTT GAAAGTCCCA  179940
AGGTCAGGAG TCGTGAAGCT GGGATTAAAA CCTAATCATC TGACTTTAGA GAGTAGACAC  180000
TTGCTCCATG CATATTGCCT CCAATTCATT CATTCAAGCA CTCCCTGCTC AAGAAGTTCT  180060
TTCTTATGTT GAGCTGAAAT CTGCAGCCCT ATGCGTTTTA CCCAGCAGTC CTGGTGCTGT  180120
TCCCTAAAAT CACTTAGACT GTGCCTGCTC TTTCTGTGTT TACAGTGTCA GCTGTAATAT  180180
CCCCCTCTTC GGCCTAACGT TTCTGAAGTC CCTTGCCACT GGGTCTCCTC TCCTCTTCCT  180240
GTGTTCTTTC TAAGAACACC TATGCAGATA GGTGTCTTCT GTACAGGGAA GCTGTTCCTG  180300
AGATCCGGGC ATCGACTCTG TTAGAATAAT CTACGTATGA GTTATTTTTT TGAGAACTAT  180360
GTGTCATTGC TGACTCATAT TAACTCTGTG GTTAACTAAA ATCTCAAGAT CTCTTTATGT  180420
TTGTTGAGAA ACTTATTTAA CTTCTCTGGC CCTCCGTTTC CTTCACTGAG CAGTGGAGTG  180480
ATTGATAACC TCCACCTGTG GTTGCTGAAG GTCTTGCACA AGATGATATA GTTAAAGTAG  180540
CTAGCAGTGC CCACGTACGG CGGATGCCTC ACAACGGTTT GCAGCCATCT CTCTATCTGT  180600
GTCTTTGTCT CTCTCTCACA CTGGTTTTGG CTTACTGTTA GCAGCTAGCC GAGATAAGTG  180660
TGTTTATGGT CTTTGCATGT ATTGTTTCTG TAGCATACTG GAGGATTACA AGAGGTTGGG  180720
GAGTGAGGGG GCGGTGAGGA GTAGACAAAG GCAGCCAACT CTTCCAAGTT TAGCTTAGAA  180780
GGAAGGAGCG GTAAACCCTA GTTGAATGTT GGACTGAAGC AGGTTTGTTT TTGTTTTGTT  180840
TAAAGGATAG GGAAGATCTG TGCGTGTTTC CAGGATAAAG AAAAGGAGAG AATATGATAT  180900
TAAAGATTCT GGAAGTGGGA GAAGGAGCAA TGAAATACAG ACTTGAAGTC AGTGGCATGG  180960
ACAGGGTCAA GATCACAGTT AGAGGATGCA GCCTTAGAGA AAAGGAAGGG GCTCGGTTCT  181020
CTGAGCAAGG AGGGAAAGAA GAGAGGCAGA TGCAGAGAAG TACGGCACAT CGTGCTGCTG  181080
GTTGTAGAAA TAACCTCTGA CTTTTAATAA AGTCATCCCT CGGTATCCCT GGGGGATTAG  181140
TTCTATGACC TCCCTCGGAT GCCAAAATTC GTGGATGCTC AAGTCCCTGA TATAAAATGG  181200
CATAGTATTT GCATTTAACC TACACACATC CTCCATATCC TTTTTTTTTT TTTTTTTTTT  181260
TTTTTTTTTT TTTTGTGAG ATGGAGTCTT GCTCTGTCGC CCTGGCTGGA GTACAGTGGC  181320
TCGATCTTGG CTCACTGCAA GCTCCGCCTC CCGGGTTCAT GCCATTCTCC TGCCTCAGCC  181380
TACAGGTGCC TGCCACCACG CCCAGCTAAT TTTTTTTTTG TATTTTTTAG TAGAGACAGG  181440
GTTTCACCAT GTTAGCCAGG ATGGTCTCGA CACATCCTCC ATATACTTTA AGTAACCTCT  181500
AGATAATCTC TAGATTACTT GTTTTGTCTT TTTTTTTTTT TTTTCTTTTT GAGATGGAGT  181560
TTCACTCTTG TCACCCAGGC TGGAGTGCAA TGGTGCAATC TCAGTTCACT GCAACCTCCG  181620
CCTCCTGGGT TCAAGCAATT CTCCTGTCTC AGCCTCCTGT GTAGCTAGGA TTACAGGCCC  181680
CTCCCCACCC CCACCCCCCA ACAACTGGCT AATTTTTGTA TTTTTAGTAG AGATGGGGTG  181740
TCACCACGTT GGCCTGGCTG GTCTTGAACT CCTGACCTCA GGTGATCTAC CCGCTTCAGC  181800
CTCCCAAAGT GATGGGATTA TAGGCATGAG CCACTGTGTG TGGCCTAGAT TACTTATAAT  181860
ACCTGATAGA ATGTAAATGC TATGTAAACA GTTGTTATAC TGTATTGTTA AAAGACAGTA  181920
ACAAGAAAAA AAATCTGTAC ATGTTCAGTC CAGACAAATG GTTTTCTGTT TTTTTTTTTT  181980
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FIG. 6.69

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TTTTTTAATA TTTTTGGTCA GTGGTTGGTT GACTCCAGGA ATGCAGAACC CGCAGATATA   182040
GAAGGTTGAT TATGCGTTCA GAGGCAGGGA ATACCATCTT GGGTTCCAGA AAGAAAATGA   182100
TCAGCATTTT CTGTCATACT CTGGTAAAAA CAGATCTTTT GAATGGACAG GTGTATTAAA   182160
CCCTGTGGAG CTGGCTGGGC CTGGCGGCTC ACGCCTGTAA TCCCAGCACT TTGGGAGGCT   182220
GAGGCAGGTG GATCACGAGG TCAGGAGTTC GAGACCAGCC TGGCCAATAT GGTGAAACCC   182280
CAACTCTACT AAAAATACAA AAATTAGCCG GGCGTGATGA CGCATGCCTG TAGTCCCAGC   182340
TACTCGGGAG GCTGAGGCAG AAGAATCGCT TGAACCCTGG AGGTGGAGGT TGCAGTGAGC   182400
CGAGATCACG CCACTGCACT CCAGCCTGGG CAACAGAGTG AGACTCCGTA TCTAAAAAAA   182460
AAAAACAAAA ACCTGTGGAG CTGATGAAAT CCTGCAGGGA GCTTCACGGT GACAGCAAGA   182520
GGAGAAACAC ATCCCCATAT GCCCCGCAGA GTTTGAAGTC CCGGCTGCAC CTCTCCCCAG   182580
CAGCAGGTTG ACTCTGGAAA GTTGCAGCGT TCTTACCTAC AGAGTGGGAA CAGTACTACC   182640
CATTGCACAG AGTGGGTGCA AAGCTCTGTG ACGGAATACA TGGCAAGTGC CCACCACATT   182700
GCCTGGGATG AGGTGGGCCC TTCCTTTACG TAAGAGAGCC CTACAGATAC ACTCAAAGTG   182760
GGCACATTCC TACAGAAGGA GTGTTATTTG TGTAGAAAAG AAAAACATGA AAGGCTTTTA   182820
TTCCTATACA CAATAAAGCA CCCCTTTAAT GTCTTTTTGA GGAGGATAAT ATGAAATTGA   182880
TGAAAAGGAA CCCTGTGGTT GGATCCCTGA CAATCACATG TATCCCTTTT TTCACTCTTG   182940
AAAAAGGAGT AAAGGAATAA AATAGAAGGG GAGAGGGGGC AGAGAGACCT TCACCGCCCC   183000
CCCCCCACCC CCCATCATCC AATCTATAGT CAAACCCTCC AGACTGTGTC TCCTTGGCAT   183060
CTCTGACACC CCCACCGCCA CCACCCCAGT CAATTCCTAT CTTATCCCCC TATCCTGGAT   183120
CTGATTCTGC TAAGTTCCTG CCACACTAAA GACAGGGTGG CTTTCTGATG ACAACATTCC   183180
TCTGCTTAAA CCTGTCAGTA ATTCCTTGTT GCTCTCAGAC GGAACTAAGT TCTGAATTTC   183240
TTCACACGGC TCTCAGCAAG GTCACAGTCA CCCTGCTAGG CCCCAGGGGC AAATCTCAAT   183300
GGTCATCTTC TTGAAGACCT GGCTCAGTTA TTTCTTTCTC ATTGAGGCTC ACGACCCCAC   183360
CTTCTTGCAT GCCTCAAACG GCCCCTTACC ATGCTCTTCT TTCGCCCATA GCTCAGCACA   183420
CCATATCATT TTAATTTATG TATTTTGCTT AATGTGGATG ATCTGTCTCC TCCTCTGCTG   183480
TCCTCACCAG AGCATCAGTT CCTCAAACCA AGGCTCTTTG TTTTGTTCTT GGATGCAAGC   183540
TAAATGTCTG GCATGTGGCA AATGGTCATA GATACATGTC ATTGAAAGAA TGATTCATCA   183600
CCTCCCTCTT TGGCCTTGTC TGTGGTTCTA CCAAATCCCA TTCCCTCCCC AGTGCCCTCC   183660
ATTCCCCCTC CTTGGCTGAA CATTCTGAAC CACAGACAGT TCTTTACCCT GAACCTTTGC   183720
ATATTTTGTT CTCTTAGCTT AGAGCGGCCC CTCTCCCTCC GTCTGCTTGG CTAATTTCTA   183780
CTTGTTCTTC AGATTTTATC TTAGATGTCA TTCCCTCAAG GAATCCTTCT GTGACTCAAC   183840
ATGGAATTAA GTTGCCTCCT TTGACCCTGA AAGCACCATG TACTCAATCT CATCTTGGCA   183900
TGACTCACTT TGCTGTGTGG AATGTCTGCT TTCCTTGTTT GTCTATTCCT TTAGACTGTA   183960
AGATCCTAGA AAGTGGGGGC CGTGCCTTGC TCATGACTGT GTTTCTAACA CCAAACACAG   184020
TGTTCAGTAG AGAGCAGCTG CTGAGTACGT TTCTGCTAAA TGACAGTTGA TGGAGGACAT   184080
TTAGGGTTGC TTGGAGGTCA AGTCAAGGAG GCATTTAACA TTCTAGTAAA ACAAGGAAGT   184140
AACAGGCTCC TGAACATGCC CACAATGAAC CAGATGCAAA CCTTTTCCCT TGGCAGGATT   184200
CTTTGCCCAT AAAGTGGAGC ACGAAAGCAG GACCCAGAAT GGGAGGAGCT TCCAGAGGAC   184260
CGGAACACTT GCCTTTGAGC GGGTCTACAC TGCCAAGTGA GTCCTAACCC TGATGTTGCT   184320
AATAAGTGGG GGCATGGGCA GGGGGGCCTC CTTCTAGGAG TGATGACCAC CCTTAATACC   184380
ACATGTCTGT CTGAGCCAAG TTTCTGAGCG CCAGGGAGGT GAGGAAGGTT GGACTTCACC   184440
AGAGAGGCTT TGTGGACACC CTTTATCATC TTAGTGAGTG CTAGTGTCAA AACAAAGGGA   184500
GTGGGGATAT GGGGCACATT GGTGGAGGGA GGTGTGATCT CTGCAGCTTC AGAAAGATCT   184560
GAAAGAGTCA TTTGGTTAGA GAAGTTGACC TATTTCCTGT GGGGTTAGAC CAGGGTTGCT   184620
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FIG. 6.70

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ACTGTGAACA CCAGCCATGA CTCACCAGTC ACCTTCAGAA GCCACAGGCA GGACATGCTG   184680
ACGACAGCCT TCAACTCACC CACCCCTTGC TCCCCTGCGG GTGGAAGTCT GGAGGTGACA   184740
CCACTGCATT TTCTAACACG GGGGCTCCTT GAGCAACTAG AACAAGAACA GAAAGAATGG   184800
GGACATTAGC AGGTGCTTTC CCCCTCTCTC ATTCTTTTCT TTGAATAAAA AGGTTGTTTG   184860
AAAACACCTG AGCGGCTCCT AAAGATGGGT GCAATCTATT CGGGATGCAA ATCCGAATGA   184920
ATGTTATTCA AATGCTCCTC TCTTCTTTAT GCAGAGTGTA TTTCAAGGCT CAGCCAGTGG   184980
CAGGCATGCT GGGGACTATG GACTACGGAC TAGGGGCCTG TCACAGAGGA AGGCCTCATG   185040
CTAGAGAGCT AAGGGAGGAG CTGGCCTTCA GTTCCATCCC AGGAGCAACT TTGATGTTCC   185100
CAGAGATCCT TCCAAAGGGG GAGTCATGGT CACCCAAGAA AAATGTATTC AGAATGCCAA   185160
GAATGGTGCA AACTCAGGAC AAAGATTCAC ACTGCAGGGT TGGAGTCCCT GGGCTTGCTG   185220
CTGGCACCAT GGGAGGGAGG GTCCCCTTCA GGGGTACCGT TGGTTTCCTG TGAATTAAAC   185280
TGGCTTCAAG GGATCTCGAC TGAACAGGCC TATATCACAC TCACTGATAT ACTCTCTCTT   185340
CAGTCCTTCT CCTCATCTAG GTATTTTTAA TTGTTTCAGT GAGGTGTAGG CATGAGGGGA   185400
TTGGAGGGGG CATCTCCTCC ATTGCAGTTT TTCATTGGCT GCTTTGCTCC CTCAGCTCCG   185460
AAATCGCTGG GCCACTCTCG AACGCATTAG TACGGTAGTC ACAGGTTGAT TGCCTGGCCC   185520
CTTGCCCTCT GTGGGCATTT TCCCTTTCAG ACAGCCCCTG AGTACTCACA GTGCTGCTAC   185580
AGTGGGCCAC CTAGATCTCC CTCTTTCTCC ATGCTCCCAC GTGCTCTGGG CTCCACTCCC   185640
TTCTCCCAAG CACTTCTGTC CAGGGCTATT CCAGCAGTCT GACCTCAAGG AAATCCTTTG   185700
CTAAACTGAT TATAGAGAGG TTTCTATTTT AACATTTAGG TCTTCCATGT ATTAATTCTC   185760
AGAATCAATT TAAGATGTTT AAAGGTGTGA TTTAAGACAT TTTAAAACCA TTTGGAGGAG   185820
AGTACAGAAA TTATGTCACT TGCTGTCAGC CTCTTTGCAC CATCTGCAGA GAAAGATACT   185880
AGAGTCCCGC CTTGGACACA TCCACATGCA AGAGGTGCAA AGAAGGTGTC TTTGATGAGG   185940
CAAGGTCAAA ACTTCTCCCC AGACGAAATC CAAAGAAAGC ATTCCTACTA TGCTATATCA   186000
GTTTGGAAAG AAAAACTTCT GCCAGGTGAC TGCATTCTCA CTGGTCACAT TGTGTTCCTA   186060
TGGACTCCTC AGCTCAACCA ATTTGGAGAA GTTATGGTGC AATTTCACCA TATCTGGTTA   186120
GAAGTTAAGT TTCCAATTTG CTGGCAATGA AGAAGAAATG GAGCAGGCCA GGCTGTGTAG   186180
TTTCTGCCAC GTGCCCCCGG GAGTGAACAG CTCTGTTTGT AAGAAGCCAT GGTGCTTAGA   186240
CCTGGGCTCG CTAGTTGCCA GCCTCCAAAT TGCAGAAGTG CCCTTTGGTT GGTGGCTATG   186300
CTGTGTCACT TGGGAAGGTC GTTTGGAAGT TCCACAGTCG TTGTGGGGTG CCAGAGATTA   186360
AAAAGCGTAA GAGGAGAGTG GAAAGTGATT GTTGCTGCTT GGGCATCCCC ACCGTGTGGG   186420
TGCTGCAGCC CAGCTCTCAA AACCCATGGG TCTGTACACT CAACCTCCAT GAGAGGGAAG   186480
GAGAAGGATG AGGGAGGGGA GAGATAGCCA TGGAAAGGTA GGAACTAAGC AGGCAGGGTG   186540
GAGAGTTTTC TGTAAGACAA AAACTGTCTG GACACTGCTG CGGTTCTGTT ACAAAGACCA   186600
CTTCCTCCCT GGGCCAGCAA CATATCTGTG TGCCTGTCTG GGTTGTAAAA AGGGTCAAAG   186660
ATCAATGCAG CAGGCAGCTA CATGCTGGCA AAAGCCAGAG GCAGCTGGTC TGTTTGCCTG   186720
TGCCAGGAAA CCACTGGGAA TGGGGTTGTG TGTTATTCTA GGAGAAAGTC GTCCCAGCAG   186780
CAGCTTCTCC AGGGGCATCC AAGAGCACTG AAAAGGGTTG CAAGATGACC CATGAGGCTG   186840
CAGGAAGAAA AGAACATGCA TTTAATCTTG CTATCTGAAA AGTAAGACAT GAAGCTTTCC   186900
TCATTTTTAA TATACACATG GACAGTAGTA TGTGTATATA GTTTATATGC AAATATACTT   186960
GTTATAAGGT TGCATGCTCA AAATTTTTGG TTCATGGGGT GTGGGATCAT AAATGTTTAG   187020
GGACCATGGC TATCAAGGAA AAACAGCATG AAGGATAAAT GATACTGGTG GATTAAAAAG   187080
ACAGATGCAT GTATTTTTAG CATAAAACAC AACTGCTGAC TGATACAGAT AGCTCAAGAT   187140
TCTGGGGCAG CTGCTGAACA GATACACTAG CCAGTGTGGC TCATCGGCTC AGACTTGGCC   187200
TTAATTAATG GGCTGTCCCT CCACCCATCT CCCATGAGGG CAGAGCTGAG CCAGGGTTTG   187260
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FIG. 6.71

AGAGCTAAAA GGAATTGGAC CTGGACTCTG TTCACGTGTA TATTTTAATT CTAATTAATT 187320
CATTCTTTTG AAAGACAGAG TCACACTCTG TTGCCTAGGC TGGAGTGCAG TGGCACGATC 187380
TTGGCTCACT GCAACCTCGG CCTCCCAGGT TCAAGTTATT CTCCTGCTTC AGCCTCCTGA 187440
GTAGCTGGGA TTATAGGCAC ATGCCCCCAT GCCTGACTAA TTTTTGTATT TTTAGTAGAG 187500
ACGGGGTTTC ACCATGTCAG GCTGGTCTTG AACTCCTGAC CTCAGGTTAT CCACCCGCCT 187560
TGGCCCCTCA AAGTGTTGGA ATTACAGGTG TGAGCCACCG TGCCTGGCCT GTTCACATGT 187620
ATAAAACACA GTTTAATGTC CTATTCCCAG CCAATGAGCA TGGCTAGAGC AGCCTTGGTC 187680
AAAGTTTGGT TTTTGGAGAA AAATCCTTGT TAGCTGACCT AAGATTCCTC TTTGTGAGTG 187740
TAAGTAAGCA CAGGTTGCAG AGAGGAGAAG GGTCTCTGGA GAGGTGTAAT TTTCTAAATG 187800
GATTACAAGT TCATGGACTT TTAACAGGTG TTACAGGGGA TAACAAGTTC TTTATAGACA 187860
GACTTTTGAG GACGTTTAAG GGTATTCTGA TTCTTGGTTT TCTAAGAGGG GAATGTATTA 187920
TTTAACTACA GACACCCCTA CCGCCCACTT TTTGCAGAGT GTATCAAAAC ATGTTTTTGG 187980
AATACCACCC TCATGTCGCT TCTCCCTGCA TCTCTTATCT CTTGGTGTCC ATTCTAGACT 188040
CACTTTCTTT CTGTTTTTTA TTTTTATTTT TTTTTGAGAT GGAGCTTCAC TCTGTCACCA 188100
GGCTGGAGTG CAGTGGTGCA ATCTTGGCTG ACTGCAACCT CTGCCTTCCG GGCTTAAGCA 188160
ATTTTTGTGC CTCAGCCTCC TGAGTAGCTG GGATTACAGC ATGCACCACC ATGTCCGGCT 188220
AATTTTTGTA TCTTTAGTAG AGACAGGGTT TCACTATGCT GGCCAGCCTG GTCTCAAACT 188280
CCTTACCTCA GGTGATCTGC CCGCCTCGGC CTCCCAGAGT GCTCAGATTA CAGACGTGAG 188340
CCACTGGTGC CTGGCCTAGA CTCACTTTCA AGTGGCATAG ACTTGTAAAA TTATTTAAAG 188400
GTGATAGGTC TACAATGATC CTGTCAATTA GTATTGACAC TATTATTAAT AAACTGTTAT 188460
TAATTATATT TACTTACTTT AAATTAATCC AAACTAATTA ACGGAACACT AAAGAGTTTC 188520
TATGTTTTAT TCCCAGAGGT GGAGAAAAAT GAAAGGGAAT ATAGCAACGA ATTCTTTTCT 188580
CCATAAAAAC ATGAATAGTG CAGCACATCA AGTTGAACAT ACCACAGCAA ATTGTTGCAA 188640
GATCTGCTGA GTAGCTCCTA TTTAGACCTC AAGGAATGAG ACTCAAAATG GGTTCATCAG 188700
TTCTGTTTTG CAGAAAAAAT AGCGCAAAAT TTCTCAAAAG AAAATCCAGA ATAATAATAA 188760
TTTGTCAATA GGAAAGACAT TTCCACTGGG GGTTAAGAAG GAAGACATTG GAACAATGAT 188820
AGCCACCACT TATTGAATGC TTACTGTGAG CCAGGTGGCA CTTCACCTTG TTTCATTCTC 188880
ACAACAGTCT AGGGAAGTAA TTACTAATGT CTCCATCCAC CTCTTGTAGA TGAGCAAACT 188940
GAGGCTCATT GAGGCTAGGA AATGCACCCA CACTCACATA GCCCATAAGA GGCAGCCATG 189000
GCATTGGGCC CAGACCATGT GAACTTCAAA GACTACACGA GCAGCCACTG GGCAGCTGTC 189060
ATGGCTAAAG CCACTTGAAT TCAGCCCAGC AGCAACCCCC TCTCCAGGAG GGGCACATAA 189120
GCTTGCAGCT TTGGGTAGAA GCTGCACTTG AAGTCCTGGA TGGCGAGAGG GACTGGCTTG 189180
AGCCAGAGCC AGGAACAAGG CTCTGAGAAT ATTCTGGAAA TCCACAGGAG GAACCCATTT 189240
TCTTACAGCT GGGAGAATTT CATTCAACTC CAGGCTGACC ATGTTTTATT AGGAACGAAG 189300
GTGACTTGAA CTAATAGTCA GGAATGGTTG AATACGGACC CAATGTCAAA TCACTAGGCA 189360
GTTCACATTT CTAATGAGCA AATCCCTTAG ACAATTAAGA ATTTTTTTCC TTTTGCATAA 189420
CCCAGACAAA ATCGCTACTT AAAAACAAAC CAAAGACCCG AAACATGAGA AAGAGAAGGA 189480
AGCAGGGGAA ATCTTTGGTA CTAATAAGTT TTTAAACAAT AAGAGCACCA GATATTTTAC 189540
CCCATCAGAC ACAGAATGTT ATTCGAATAA CCAAAAAAGG AATTTTTTCT CTAAGTTTCT 189600
TGAACTGGAA AATGAATCAT ATTTTCTCAG TCCTGAGGCT GCAATTTTGT GCCTCTAGTA 189660
ACATATAAGA ATAGATGTGA TGCCAGTGCC CAGTAGCTGC TGCAATTGTT ACTTGGGGAC 189720
CTGTTTATTC ACTAAGCACT TCACCCCAGT GATAAATTTG TAGGGGCCTC CTGCCCTTTG 189780
GAGCTCCTAC CGTGTCCATT AGATCAGTGG AAATTCTGGG ATTCAGAGCA CTTTGCAAGG 189840
TCAGCAGGGG TCTGCTCTTT CTGTCCTGTT CCTGGTTTTT GGTTGTGCCT GGATTCCAGG 189900

FIG. 6.72

GTAGGTTTCT CATCTGTTAC CTTCATAGAC TTCTCCAGAA AAGGATCTTT TGACCATCAG   189960
AGGACCACGA AGATTCCATT GGTGAGGCGC AGATAACCTG ATCTCTCTGG GTTCTCTGCA   190020
GGGCACAGAT GAAGGGCTGG CCATTCCCAA GTTCTCAGTG GTACCACTGA GGCATGAGAC   190080
CCTAATGGTT TGCATGAGCA GTTTGAAAAT TGCATCTTTG TTTTTACCTA TATAATCACA   190140
TGAAACCCGT GGTTCTCAAA CGTCAGCAGG CATCAGCATC ACATGGAGGG CTTGTTAAAA   190200
CAGATTTCTG GGCCCCAACA CAGAGTTTTA AATTCTGAAG GCCTGAGGTG GGTGTGAACA   190260
TTTGCATTTC TAACATGTTC TCGATGCTGC TGCCGCCTCT GGTCCCGAGA GCATGCCTGG   190320
AGAACTGCCA CCTTCGACCA TGGACTGTGA GAATTCACAT GGACCTCAGA ATTATAATCA   190380
GTCTCTCAGT TTTACAGATA AGGAAACTAA ATCCAGAGAG ATTGTTTTGC CAATGGTGAA   190440
CAGCTGGTTA AAGTCAGGAT GGAGACTTTA ATCCTAGTCA AGTGACCTTT CCTCTGTATT   190500
TATTTCCCTC CCTTTTTATG CCTCTCAAGT CTAGTTACAC TGTTTTTCAT GGATGGGCAT   190560
ATTTATTGTC CTGATCTGGA CTGCAGACTT CTCAGGAGGA CACCTATGAT TTAATTTAGT   190620
ATAGTTGAAG AGTTAACAGA CATGGCTTTG GAGACAGACT GATTATGGTG TGAATCCCGG   190680
CTTTGCCACT CCCTAGCTGG ATGACCCTGA GCAAGTTATT CAGCTTCTCC AAGCCTGAGT   190740
TCCTTATTGG AAACATGAGA GCAATTGTGA TAGGCAGAAT AATGGCCCCC TCACCAATCA   190800
TGCCCACATC CTAATCCTAG GAACCTGTGA ATATGTTATG TTACATGGCA AGGGGAAATT   190860
CAGGCAGCTA GCCAGTTGGC CTTAAAATAA AGAGATTATC CTGGATGATC TGGGTAGGAC   190920
CTGATGTAAC CACAAGGGTC TTTTTAATGT GGAAGAAGGA GGCATAAGAG TAGATGTCAG   190980
AGTCATTCAA AATAAGAAAG ATTTGATGGG CCATCCCTGA CTTTCAGGTT GGAAGGAGGT   191040
TCTGAGTCAA GGAATACAGG TGACCTCTAG AAGCTGGAGA AGGCAAGGAA ATGGTTTCTC   191100
CCCTAGAAGT TCCAGAAGGA TTGCAGCCCT GCTAATATCT TGACTTTATA GCCCTTTGAG   191160
ATTTATTTTG GATTTCTGAC ATCCTGAACC ATAGTAAAAG GGTGTTTTTT GTTTTTTTGA   191220
GACAGAGTCT TGCTCTGTTG CCTGGGCTGG AGTGCAGTGG TGTGATCTTG GCTCGCTGCA   191280
ACCTCCGCCT CCCAGGTTCA AGTGATTCTC CTGCCTCAGC CTCCTGAGTA GCTGGGATTA   191340
CAGGTGCTTG CCACCACACC TGGCTATTTT TTGTGTTTTT AGTAGAGACA GGGTTTCACC   191400
ATGTTGGCCA GGCTGGTCTT GAACTCCTGA CCTTGTGATC TGCCTGCCTC AGCCTCCCAA   191460
ATTGCTGGGA TTACAAGGCG TGTTGTTTTA AGCCACTCAG TTTGTGGCCA CTTGTTACAG   191520
CAGCAAGAGG AAACTCATAC AGTTATCATG TGAACTCACA GGAATATGGT GAGTTAAAAA   191580
GAGAGGAAGG GTGCAAAACA TCCACGGTAG AGTGAGAACT CTCCAGGGAG TGAGGACTGT   191640
GCCCAGCATA CAGTGATCAC CCTCTTAGTA AGCTAAGTTT CTGAGCACCA GCTTTTTTGA   191700
GTTGACTTTG TTGTCTTTAA CATTTGAAGA TCACCCTTCT TTGCTCAGCC TGGCTTGCAG   191760
ACCTGGGCTG ATTTGTGGAT CTGATAGAAA AGTTTCCTTA GTTGGGCTCT TCTCCCCGAC   191820
CACCCCCATG CCAGTGTGGC CACATCCTCT GTCTGCATTG CTCACTCTTC AATTCCAAGA   191880
AGCGCAGGGG CACCGCCAGG AACAGGAACC CTGCCAGAGG AATACATCAA GAAACCAAGT   191940
CTCCCTTACG CATCACCGTA GGAACAGAGT TAATGGATTA TGAACATGTG TTTGCTTTAT   192000
ACCATTGTTT GTTTCCCAGG TGGCAGCTGG CTGCCCCATC TTATTGGGTA GATGTAAGTG   192060
GAATTACGAA TGGGATTTAT GTTTCATGCA CGATGGTGAT TATTAACTTC AACTTTCAGG   192120
TAATTTTCAG ACCACATTGC ACTAACTTGG TCTCTGATTG TTTTTCTCCT TGTTTGTTTA   192180
TTCTGCAGCC AGAACTGTGT AGATGCGTAC CCCACTTTCC TCGCTGTGCT CTGGTCTGCG   192240
GGGCTACTTT GCAGCCAAGG TAACTCAGAC TTCCCTTTGT TCATTCTCCT TCTATAAAGT   192300
GCATCTCAAG GAGGTTCAAA GGGCAGGCTT TTTGTTGAAA GGACTTTGCC TGACCTCTGG   192360
CTCCCATCTG TGAAGCCCTG GAGAGGTGAG AGCCCTCGGG AGGCCGTGTT TCAGGCATGC   192420
TCTGCACCCG TGCAGAGCGC GTGTGATAAT GCATTGCTAA TGCTTGCTCC CTGGTGGCTG   192480
GCTGAGAGCT GCTGTGCTGA CAAGGGTGGT TTAAGGCTAA ATGTGACTCA GAATCCTTAA   192540

FIG. 6.73

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GCAGTGTTAG TTCAGATACA AGGGCATTAT AAATGAGAGT GCCTGAGGGA TCTATTTTGG   192600
GACCGCTGTC ACTTGGCTCT TCTGCTAATA AGCTTCCAGT GTGGTGGCCC TCCTTCAGGC   192660
ATGTTTCCAC TGAGCCACGG GCTGGATGCC ACATCCCCGG CCTTCCCACA GTTATCAGCA   192720
GCCCACAGGC TTGACTTGAG CAAGTTGGAA AGACAAATCA ACTTCCAGAG TTGATTTAAC   192780
ATTGAGTGGA AATCAGTCAT ACTTTTGGTC CCCTTTCGGG GCCACGCCTG GCACTGTGCC   192840
TGGTGGCAGA TCGGCATGAA CTGGCCAGCT TCTGTGGCCC TGGAGGGCAC AGGCAGAAAG   192900
GCCACACTCA GTCCCATGAT GAACTGTTTA AGACTTATTG TTGTCTCCCC GCTCTGTAAA   192960
GTAGATAGAG TGGATTTTAT GTCCCTTATT ACCTTTCAGG ATACTTTGAC TCAGGGAGAT   193020
AAAGTAACTT GGGTACAGCT ACTCAGCTGG TGAAGAACAC AGGCAGAATG AGTGCCTGGG   193080
TCTTTTGACT TAAAATTCTG GATTTTTCAC AAAGATCCTC TTACTTTATT CATTTACATA   193140
ATAAATATAT ATTGAAGAGC TACTCTGTGC CAAGCCCTGT GCCTAGATAT ACAGTGATAA   193200
ATAAAGAGTA GCTTCTAGAG GTCACCTGGC GGTGAGGCAC AGGCCAGCTG GCAAGATGGA   193260
CCACAGAAGT CAGTGAATGA AGACAATGAC AAGGGTGGGA AGCGCCATAT GGGAAGAGAA   193320
CCAAGTTCAG TGATAGAGAG CAGAGGTGAG GCGGCAGCAG AAACCACTTA AGGGACACCA   193380
CGTGGCACTC CTTCTGTGCT GAGAAGGCTG TCAGTAAGCT CACCATTTAT TTCCTATTTT   193440
CTCTCCTGAG TTAAATAGGA AACATGTCTC GCATTACTTG AAAAATCAAG TCAAACTATG   193500
CTCTTACTAG GAGTTATGGT TCTTTTTATG TCTTAGATGA TGCTTGATCT AGATGAATGC   193560
GGACTTGCTG TAGCTAGATA AATACAATGG GAGTTTGAAG GTGTTTCGTA GCCCTGGAAA   193620
TAGGTATTTC CTGTCAAAAC AAGCTTTGTC ATTGCCAGCA GACAAAAGCA TCAGTAACCT   193680
TGGTTGATAA TCGTCATTTC TTAGGAATAA AGTAGACTGT AGAATTTTTT TTAGCAGAAA   193740
GGAAACCCAA AGATAATTCT AGTGCAAATC CCTCACTTTA TAGAGCAGAA GCTCAAGTCC   193800
CAGAGGAACA AGTGGCTTGA ACGAACATCA GAATTTTAGG GGCTGGATTT GTACCCTCCT   193860
GGTGCCAGCA GCCCACTTCC CTGCAGGAGG CACTCACCTT CCTTGCACAG GGGTATGAGT   193920
GTGGCCATTT TCCACCCATA ATCTCTGTTA GCTCATGTTC AATTGGGTTC CCATTGAAAG   193980
AAAAATGGAC CAGTAAGTTG GAGCAGAATC ATTCAGATGG TATAACATAA GGAAAAACTT   194040
TGCCCAAGGC AAATCGTGAT TGTGACAGCT TTGTGATTTT TAGAGAATAG CATGGGCCAG   194100
GCACAGTGGC TCATGCCTGT AATCCCAGCA CTTTGGGAGG CCGAGGCAGG CAGGTCACTT   194160
GAGGTTGGGA GTTCGACAAC AGCCTGACCA ACATGGAGAA ACCCTGTCTC TACTAAAAAT   194220
ACAAAATTAG CTGGGCGTGG TGGTGCATGC CTGTAATGCC AGCTACTCGG GAGGCTGAGG   194280
CAGGAGAATC ACTTAAACCT GGGAGGCGGA GGTTGCGGTG AACCAAGATA GCACCATTGC   194340
ACTCCAGCCT GGGCAACAAG AGTGAAACTC CGTCTCAAAA AGAGTTCACA GTTTCTCTTT   194400
TGCTTTGATT TTCTTATCTG CCGGATAACA ATAGTATTTT GGAAGGCAGG AGGAATTGTG   194460
GAAAGAAATG GGTTTTGGGG AGTGGCTGAT TGGAGGCAAA TCCAAGGACA CTCATTGCTG   194520
GTGTGTGACT CCAGGCAGTT ACTCAGCTTT TCCAAGCCTC AGTTTCCTTA TTGTAAAACA   194580
GGACCATGGT CTAGCTAGTA GCATTCCTAT GGTGAGTGAA ATAATATGTA TAAAGCTCCT   194640
GACACAGTGC TTGGCATATA TCAGATTGAG CCATGTAAAA CTGCCAATAT CTGGCTATTT   194700
ATGACCTACA AAAATAGCAT TTCATATGAT TCCACCTAAC ATCTGAAGCG CAATAAATGT   194760
TATTATTGAT AATGCAGGTG GTGGTGATAA AGTTTTGAAA TCAGAAAGAC CTGGCTTCAA   194820
ATTCCACGCC TTCACTGGCC TGACTTATTT TCATTCATTT GACAAATATT ATTTTGAACA   194880
CCCCTATGTG CCAGGCACTA TGCCAGGCTC AGAGATGATC TAGGAAAAAG ACAGATGTCC   194940
TCATCTGTCT TAGGCTCTTG TGGCCTAAGC CTAAATTTCC TCGTCTGTCA AATGGTGACA   195000
GTAACACACT CCTTACCAGA GAGCTGGGAG GATTGGAGAC TCAAGTTCCC AAAACGCCAG   195060
GAGCACTGCG GCAGGTGAAA AGTATTCCCT CAATGGCGGA AGTGTTTAAA TTGCTTTTAT   195120
ATCTGTAGCT CTAGATAACA CTAGTTCCAG CTTAGTTAAC TCCCAGCTCC AAGCCTTCAG   195180
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FIG. 6.74

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GACTTCATAG AGTTATTGGG GTGCTGCTCT TGGCAGTTTC CCAAAAAGCT AGAATGCAGA   195240
GGGAATCTCC TTCCCAAAAA GCTAGAATGC AGAGGGAATC TCCTTCCCAA AAGGCTAGAA   195300
CGCAGAGGGA ATCTCCTTCC CAAAAGGCTA GAACGCAGAG GGAATCTCCT TCCCAAAAGG   195360
CTAGAATGCA GAGGGAATGT CCTTCTCTTC TAAATGGTAG CTGTTAGTTC AAGAAAGGTT   195420
AAACATTGTG CTGTGGGGAG GCTCAGGGGT GAAGGGTGTA CTTTTAAGAG AACCAGTTTC   195480
AGAGCTGGGT TTGGGGTTTA AGCCCTACCC TCTGCCCCCT TTTACGAGCT GACAGCCTTA   195540
TGCAAGCCTG GTTGACCACC TGAACCCACG TTTCCACATC TGGAAATAGA AATGTGGGTA   195600
CTAGTTATGT TGAAAGGACT CAGGTTAGAT GATAGATATG CAAATACCTT GGAAACCAGG   195660
AGTGTCCAGT CTTTTGGGTT CCCTGAGCCA CACTGGAAGA AGAGTTGTCT TGGGCCACAC   195720
ATAGAATACA CTAACCCTAT CAATAGCTGA TGAGCTAAAG AAAAAACGTT GCAAAAAAAA   195780
TCTCATATTT TTAAGAAAGT TTATGAATTT GTGTTGGGCT GTATTCAAAG CCATCCTGGG   195840
CCACGTGCGA CCCGCAGGCT CCGGGTTGGA CAAGTTGTT GTAAACAATG CCATGATGCC   195900
GGCATAAGGT CGTTACCAGT ATTAGGAAGG TTCTCAGGTT TCCTCTAGCC CTTGGGCTCT   195960
TTTCCTGAAG TGCGTGTGTC TTCTGCTAGA TTTTGTGACC AATGTTGATT GCCTAATTGG   196020
GCTAACAGCA TGTTTTGGTG GCTACGAAAC TGACACAGGT GTTTTCATTT CTCCACTTAG   196080
TTCCTGCTGC GTTTGCTGGA CTGATGTACT TGTTTGTGAG GCAAAAGTAC TTTGTCGGTT   196140
ACCTAGGAGA GAGAACGCAG AGGTAGGTAA CTGGGACTAC TAAAGAACTG TGGAGCGATT   196200
CCTGATTTTT GAGCAGGAAG AGTGACAATT CAAAACAGTA TTTGACTAGA TTCACGGCTC   196260
CGTAGCATCC CCTTGGGTGG GAGGGGGAAG GCTGACTAGG ACCTCTGATT CTTCTTTCCC   196320
TGAGCTTTGA AGGCTCTGAA AATACAGCTG GGGGGACTTG CCCAGTTTTC TTATTAAGCA   196380
ATTCCTCCGC ATGGTGCTGG CTTTCAAAGG GTGCTTCAGT GCTGTTTGCT GCACGTGCCT   196440
TGCAGCCCCA CACCCTGCAC TCCCGCCCTG CAGAGTCTGG CGCTGGAATG ACATTTTAGG   196500
TCTGGGTTCC CAGGCCTCCT GAGAGTGAAA TGTTTCATTG TTTGTCTAGA GAAATGAGAA   196560
CTAAAGCTTG CACCTTGTGA TAAGTTGTCC TGAGGAACAT ATCTTTCAGG GACCAGAAGA   196620
AAGAATGTTG GGAAAATAAG ATGCAGTAAG ATGCAGACAT GACAGCAGGG TGCAGCGGCT   196680
CACGCCTATA ATCCCAGCAC TTTGGGAGGC TGAGGTGGGT GGATCACCTG AGGTCAGGAG   196740
TTTGAGACCA GCCTGGCCAA CATGGTGAAA CCCCGTCTCT ACTAAAAAAT ATACAAAACA   196800
TTAGCCAGGC ATGGTGGTGG GCGCCTGTAA TCCCAGCTAC TCCATAGGCT GAGGCTGGAG   196860
AATCGCTTGA ACCCAGGAGG CAGAGGTTGC AGTGAGCCGA GATTGCGCCA CTGCACTCCA   196920
GCCTGGGCAA CAAAAGCAAA ACTCCATCTC AAAAAAAAAA AAAAAAAAAA AAAAAAGAT   196980
GCAGACACGA GACTGTGAAA CTGACTAGCA TCACCATTGC ATTGTTTATA GATGTTGCCA   197040
GACAGAAAGC CCCAAAGCAG CACAGTACCT TCCTGACATC TGGACTAGGA AATCTAGATT   197100
TTAGTAAAAT ACATGCTAAT ACTTACAGAA GAAATGTCGG CGTTAGAGTA TGCCGTCAGT   197160
TCCTTAGAGA TTGCAATTCC TAATGCACTA GTATGGTTTC AGGTGCCAGG AACACGTTCT   197220
GTGAGGCTGC TGCCCCAGGT GCTGACCCCA GCCTTCCACA CCATTTTCCT TCCTTGTGTT   197280
CACAGCCGCT CTGTCTTTTA CAATAGCACC CCTCTCTAGT GGCTAATGGG CTCTATGATT   197340
AGATAGCATC CTTCAGTAGT GATAAAGGCA GTGACATCCT AGGGAGGTCA GCGGGTGAAA   197400
GCGCTATATC TGGAAAACCT GAGAGCCTGT GAAGCTCAAG GACTTGACGG GGTTAGACCG   197460
TGAGCCGGGC TGCAGCTGGA AAAAGAATGA CTGTTCTTTC AGCAGATCCT TCCCTGTGCC   197520
ATCTCTTTCT TCATTCCTCT CTAGTGGCAT TCTTATTTAT CCTCTAAAAC CACAATTCCA   197580
TTATCTCTCC TATTCTTATC AACACTGCCC TAAATGATAT TCTTTATTCT CTTTTGCCCT   197640
GGAAAACCTC TATCATGCCT TTTCCCATGT GATTACCTCG TTAAGAGTGG GGGTGGAATG   197700
TCTAGCAATG AAATAAGAGG GTCTTCTCTT TTGCCTGGCT CCCTATGCAG CCCTATCTTA   197760
CCCCCTGCAA AGTCCCAGGG ATGTGGCTCA GTCACTGCTC CTCTCTTCAT CTGTCACCAC   197820
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FIG. 6.75

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TTGCTTGAGA TCCTACAGCT GCTTTAATTC CGAGACCATC TGCAGAACAT GACAAAATTT   197880
GTCCACCTAC CCACATGTCC TTTTAACTTT AAAGGCTTTA CTAACTGATT CCTATTAGGG   197940
AATGAACAGA GGTGGCAAAA ATAAACAATA GGAGATTGAT TTACAAGAAA TCTTTAAAAT   198000
AGTAGATTTC TTCGGACCTC ATTGAAATAT AAATGGCCTG CCTTCTTGTG TCCCTCCCTG   198060
GTCTCCCTCT TTAGGTGATA AGAAGAAGAT CCTGCCAGCC CCATAACCCG CCATCTGCGC   198120
GGGTTCTAGA CCCCCTTCTC CTCCCCTCTG GCCGTGGTAG GCATTACTGA TGAATCATGG   198180
TGCTCTTTCT TCCAGAGACC AAACCTGGCC TCGGAATCCT TCTTAACACA GATACTGCTT   198240
AACACAACCA CTCTGAGCAG CTGTCATAAG TAGAAGTAAT AGATACTAGA AGAAATGTCT   198300
AAGCCTAATC TAGACCAAAA TACGGCCTGA TATAGATGCA AGCCAGAGGG GCTTTATGGT   198360
TAAATGCAAG GAGATTTTCA ACCCTGCCGT CTAGAAGCTA CTTGCTGAGA TCTTCTTCAG   198420
TTGGGCCCAT CTCCTCCCCA GGCCTCTCTT CTGTTCCTGG GCTATGTCAC ACTTGGACTC   198480
TGCAGACACC TAATGCTCTT GGGACCTGCT TTAGTTCTTG ACCTCACCAA CCGAGGAGGA   198540
ATTGCTAGAT GAGATCCTTC CCCCGGAATT TCTCTCTTGA ACCCCAGATG GTCCGTTGCC   198600
CCTTTCCAGA AGTTGCTCCA GCCCTGTCCG CTTAGGAAGT TCAGTGTCAT CCTTGATCCA   198660
GTGGGTAGGG AAGACATTCC ATAATGAATG CCCCAGTCTG AGCTTCTTCC TTCAGGCTTC   198720
AGGCTGCCCT GCGAGGATTT TGCAGCTCCC TTTTTAATGC CCTCTAGAAG TTTCTGGCTC   198780
TTATTTTCAG CCCTTCATCC TACTCTCTCT GACCCCTTCC TCTATCCTGT TTAGTTCACC   198840
TGTAGCAGTT ACTACCCAGC AGTGAAGGAT GAATCTTGGT TTCGTTTCTT TTCTCTTCTT   198900
TTCTTTTTTC TCTTCTCTTT TCCCCTTCCC TTCCCTTCCC TCCCTTCACA TCACCTCATC   198960
TCACCTCACC TTACATAGTC TTGCTCTGTC ACCCAAACTG GAGTGCAGTG GCCTGATCTT   199020
GGCTCACTGC AACCTCCACC TCTTCCCAGG TTCAAGTGAT TCTTATACCT CAGCCTCTTG   199080
AGTAGCTGAG ACTACAGGTG TGCACTACCA CACCCAGCTA ATTTTTTGTA TTTTTAGTAG   199140
AGATAGGGTT TAGCTATGTT GGCCAGGCTG GTCTCGAACT GCTGAACTCA AGCAATCTGC   199200
CATCCCCGGC CTCCCAAAGT ACTGGGAGTA TAGGCATAAG CCACCCATGA TGCCCAGCCT   199260
GAATCTTGGT TTCTTCCCCA TTCATTTAAG CTATTACCTG GGCCTGAACT CAATGGCACC   199320
TGGCACCAAC TGGCAACTGA CTCTTGGTCT TTTATTACCT ACCTTCCCTA GCAGGCACTG   199380
GGTTGCTCCC TCTTCCTATC CCATGGAGTC CTGTCCTCTG TTGGGGCTCC TACTGATCCT   199440
CTTGGCAATA TGAAGTTCTC AGCTCAATGG TGGGTGGGCA ATGACTGCCA ACTCTTGAGG   199500
CCAATGAACT CAGGTTACCC CACTCCTCCT CCTCCTGAGT TGCTCACTCA CTCCTCATTC   199560
ACTCAACATT GATTCAGTAG ATATTTGCTA CCTGCTCTGT GCCAGGTACC AGGTCAGTTG   199620
CTGAAGGAGT AACAGTGAAC ATGACGGAGT CTTTGTCCCC AAGGAGACCC AAGGTGTCTC   199680
CTAGAGCCAG GGGCACATTG CAAGACCAAA TATATTCAAC TTACCAAAAT AATCATAGAC   199740
CTAGTTCTCA AAAAGCAAGA AGACTGATTC CTCGTTGTCA TTTCTCCTCC TCAGCATCAA   199800
TGTTTTAGAG TCTGTGGGCC CCTCCAAGTG TGGAGTATGG TGTTACTTCA CCAGAGTTTG   199860
AGGAGAAACA TTCTTCTTTT GGAAGGCCGG GGAGCATAGA TGGATATCAA GGCTGCTGTT   199920
TCTAAAAGCG AAACCCACCA AACAACAGTA TTAGAATCAT CTGTGGTGCT TATTAAAGAT   199980
ACAGATTCCT GGGCCCCATC CCAGACTTAT GAATCAGAAT CTCTGCCAGA GGAAGCCTGA   200040
GAATTTGCAT CTCAGATGA TTCTGCATTC TCAGATAACA CATTCTTTAG GTGATTCTTA   200100
CACACACTGG AGTTTGGGAA TCGCTGAAGG CTGTTCACTT CTCTTTTCTG AGAAATGATT   200160
CATTCATTTC AGAAATATTT GCAGAGGTCC TTATTTATTG GAGATTTGTG GGTGGGCAGA   200220
GGAGAAATAT CTTGTCCTCA CAGAGCTTAC AATTTTTATT TTCTTTAGAG GTCACCAGGC   200280
TTAAAATGAC ACTTCCCTAA ATTCTGAAAA GAACAGATTT TTAAAACAAG AAGGGACTGT   200340
AATGTTTTCT GTTCCTACCT CGTATTTTGT TCACATTAAG AACCTGGGGT GGGAAGTGGA   200400
GGAGGGGGGG TGACTGGCGG GGGGCCACAG AGAGCTGAGC TGGGGTGGTC TCGAACTCCT   200460
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FIG. 6.76

GAACTCAAGC AATCTGCCAG CCTCAGTCTC CCAAAGTGCT GGGATTATAG GCATGAGCCA   200520
CCCACGATGC CTGGGTGGAA CTCAGGGCTC TGGATGCCTG GGCGCCCCCA TCTCCCACAC   200580
TACGGCGCCT CATCCTAGAA GTGGTTAGCA CCTTTGAGAT GGGAATTATT TAGCAGGATG   200640
CTTTTGTGTT TTCATGTAAG TTTTATGCTG CCTGTGGAGG GCACAGCTGT TTCAAAACTA   200700
ATAACCAAAT CCTGGTCTCC GAAGTCTGAA GGCATCCTTT GCCCTGCAGT GCAAAGCACG   200760
GGATTCTGGC CTCACACAGG CAGGTCTGAA CTCCTGTGTT GCCTCTTGCT GGCTGTGGGA   200820
CCTGAGGCAA ATCATGCAAC CTCTCTTTTC TGTTTGCCTA GATGGAAAAT AGGTTTACAA   200880
TACGCCCCCA TAGGATGGCT GTGAGAATTA AAGGAAGTCA TGGGTGTACA ATACCTGGCC   200940
CCGAAAGATG CTTAATAATT TAATTCTGAC CTTCCTCACT CATTTAGGAT TATGTACCAA   201000
CTTTTAGAAA CAATGAAAGA TTAGTGAGTC TTCTGTGGTT GGTATAAAAA AAAAATAGAA   201060
ACATGAAAGA GATGTCCTCC TTGTTCAAGG GCTAATGACC CTGGTGTGCG CTGTCTAGGC   201120
CCCCAAGGTC TTCCTTCCCT GCTCACAGCA TTTCAGGTTC TCCGCAGCTT TGCTGAGCCT   201180
GGGTCAGGTT CGGTATCTGC CCACCATGCT CACTTGCCAC AGCTGTGGCC CCATTTCCAA   201240
ACTTCAGAGA CTTAAAGGTG CAGCTAATGA TGTGCCCGGC CTGGGGTCAC ATTCCCTGAG   201300
CCCTGCAGAC AAGGGAGCAG GAGGCTGAGC TCTTATCTTC CACACCCTGT GCACAGCCTG   201360
GGAAGAGTTA AAGCACCCTA GTCCTATGCT GCGAGGGCCA CATGCCCTGA GACCTTGGAA   201420
AAAATCCTAC CTGAATTGAA GAGCATCACT ATTTCATCAG GAGGCGCTGC CATTTCATTT   201480
TTCACTTCGG TTTTATCTTG AGTGTAAAAC AGCTTCGCAA ATCACTTTTT CTTGTTTCTG   201540
TAATGAGCAT ATGGTGGCCT CATTCGTGTG ATAAATCTGA GCCACCACGA TATTTGACTT   201600
TTCACAATTT AATTTATCTG AACCCTCTAT TCTCTGGCTA AAAAATATCC CTTACTTGGA   201660
CTTCTTTATT TTATTTTCAA TTCCCTTACC AGCACTAGCA GGGGACTCTG TACTCATCTG   201720
CTGGCGCTGC CATAACAAAG CACTGCAGCC TGGGGGGCTC AAACCACAGA ATTTATTCTC   201780
TCACAGTCCT AGAGGCTAGA AGTCCAAGAT CAAAGTGTGG GCAGGGTCGG TTTCTCCTGC   201840
AGCCTCTCTC CTTGGCTTAT AGAGTGCCAC CTTCTACCTG TGTCTTCACA TCATCACCTC   201900
ACTGAGCATG TCTGTGTCCA AATCTCCCCT TCTTATAAGA CCCCAGTCAT ACTGGATGAG   201960
GATCCACCCA TATGAGTTCA TTTTACCTTA ATTATCTCTT TAAACACCCT GTCTCCAAAT   202020
ACAGTCCCAT TCTGAGGAAC TGAGAGTAAA GATTCAACAT ATGAATTTTG GAAGGGACCT   202080
AATTCAGCCC ACAACACCCT CTTTTGGGAT GTTTATTTTC CCCCTTAAGG AGCTAGTTAG   202140
GATGTCTTAT CTCATGAACA TGACTGTGAA CAGGAAAACA GGGAGAGAAT GAAGCTGGCC   202200
AAGGAACAGG GCTGGTGTCA GCTAGCAGTG CTTTTCTGAT GTGAGTGGGT CCCACAGGGA   202260
GCTTGTTAAA ATGCAGATTC TGATTCATTA GGTTCCAGAG GGACCTGAGA TTTCCCATTT   202320
CTGACAAGTT TCCAGTGTGG GGGCTGATGC TGCTGGTCCA CGGACCATAC TTTGAGTAGC   202380
AAGGAGCTTG ATACATAATG GCTGAGTGAC TTTCAGACTC CTGCTGTAGA AAAATTATGA   202440
GTTGGCTGGG CGTGGTGGCT CACGCCTGTA ATCCCAGCAC TTTGGGAGGC CGAGGTGGGC   202500
AGATCACCTG AGGTCAGGAG TTCGAGACCA GCCTGGCCAA CATGGTGAAA CACCATCTCT   202560
ACCAAAAATA CAAAAATTAG CCAGGTGTGG TGGCAGGTGC CTGTAATCCC AGCTACTCAG   202620
GAGGCTGAGG CAGGAGAATC GCTTGAACCC GGGAGGCAGA GGTTGCAGTG ATCTGAGATC   202680
GTGCCACTGC ACTCCAGCTG GGCAATAGAG CTTGACTCAG TCTCAAAAAA AAAAAAAGAA   202740
AAGAAAAAGA AAAATTATGA GTTATATTAT CAGCATATGG GGTGCCTTTC AAATTGATAA   2O2800
AATTTCTAAT ATTAAACCTG TGGATGCCAA ATGCTGCTCT CTGATTATGG CAGGAAACGG   202860
CACTTGGCAG TACGAAGTTA GCTGTTGGGC TGAGCTGGCT CATCTTGTTG TGCGGTCCTG   202920
ATTGCCTAAA GATGCCTTCC CAGGATCTTT ACTAACAATC CTCCTGAGTC ATTTGGACTT   2O2980
TCCCAACCTG TTATCACCTC TCAGATGGGC CAGCCATGGA GGCAGTCAGA GGAGGGCTCT   203040
GCAGAGGGAG GGCAGAAACA GGGTGGCCTC TGCATGCCAT TAGGAGGTCA CATCTCACTG   203100

FIG. 6.77

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GGGGATGCAG TTTAGGATTT AGTGCCTTGG AGAGAAGGAT AGAGTATATT AAAACATGTC  203160
TCCGCTAGGC ATGGTGGTTT ACGCCTATAA TCCCAGCACT TTGGGAGGCC GAGGTGAGTG  203220
GATTGCCTGA GCTCAGGAGT TCAAGACCAG CCTGGCTAAC ATGACGAAAC CTCATCTCTA  203280
CTAAAATACA AAAAGTTAGC TGGGAGTGGT GGCGTGCGCC TGTAGTTGCA GCTACTTGGG  203340
AGGCTGAGGC ATGAGAATCA CTTAAGCCCA GAAGACTGAG GTTGCAGTGA GCCGAGATTG  203400
CACCACTGCA CTCCAGCTTG GGCTACAGAG TGAGACTCTA TCTCAAAAAC AAAGAAACAA  203460
ACAACAACAA TAACAACAAA AACCAAGTCT CTCCCTCCAC TCAAAATGC AAGGGCCTGT  203520
CTCCCATTGC TGGGTGCCCA GGTCTCATGA ATGTAGATAT GAATTATTCC AGTCAGCCTC  203580
AGGAGAATAG AATGAGCCCT CAGATGCCGA AGCACCTTTC AGATTCCACC GGTTTTATCG  203640
GCTCATTTAA ACTTCACTTC TAACACAGTC CTGCATTACA CACGTGTCTG TCGTTATGGG  203700
CAGCTGCAGA GAGGGTCTTA ATGGTCCTAA TGCTCAGTGA GGATGCCCAA TGGTCAACAG  203760
AACCTGCCAT CTTCAGGCCA TCAAGGAGCT CTGGAGTTAA GGAAATCATG AGAGCACAGA  203820
GGGGCGGGTA CAGCAGAGCC CTCGTGGTAA TGGGTTTTGA GGTCTAGGCT CTCTTCACTT  203880
GGGTTTGAAA TAAGTTCAAT GACTAGTAAT AGCTGAGACA CTTCTACCCT TCAAATGAAG  203940
TAAATGGGAA AATGGAGCAT TGTTGAGTCC AGGGAGCTAT AATTTAAACC CCATATATCT  204000
AAAAGGGGTA ACATTTTTGT GTGTGTGAAA TTGGTGTCAT TCGCACTGCA TCTACAGTTT  204060
TCTTTTTCCT TCTCTTCCAG CACCCCTGGC TACATATTTG GGAAACGCAT CATACTCTTC  204120
CTGTTCCTCA TGTCCGTTGC TGGCATATTC AACTATTACC TCATCTTCTT TTTCGGAAGT  204180
GACTTTGAAA ACTACATAAA GACGATCTCC ACCACCATCT CCCCTCTACT TCTCATTCCC  204240
TAACTCTCTG CTGAATATGG GGTTGGTGTT CTCATCTAAT CAATACCTAC AAGTCATCAT  204300
AATTCAGCTC TTGAGAGCAT TCTGCTCTTC TTTAGATGGC TGTAAATCTA TTGGCCATCT  204360
GGGCTTCACA GCTTGAGTTA ACCTTGCTTT TCCGGGAACA AAATGATGTC ATGTCAGCTC  204420
CGCCCCTTGA ACATGACCGT GGCCCCAAAT TTGCTATTCC CATGCATTTT GTTTGTTTCT  204480
TCACTTATCC TGTTCTCTGA AGATGTTTTG TGACCAGGTT TGTGTTTTCT TAAAATAAAA  204540
TGCAGAGACA TGTTTTAAGC TGATAGTTGA GGGGTTTTGT TAATGGCTTT TGGGGGATTT  204600
ATCTCTATAC CCACAAACGA CTAGTTTGTT TTCCTCAAAC TAAATGATAA TATTAAAAAT  204660
ACACATCCTG GCCAGGTGTG GTGGCTCATA CCTGTAATCC CAGCACTTTG GGAGGCCGAG  204720
GCAGGTGGAT CACTTGAGGT CAGGAATTAA GACCAGCCTG GCCAATATGG TGAAAGCCTG  204780
TCTGTACTAA AAATACAAAA ATTAGCCAGG TATGCTGGTG GATGCTTATA ATCCCAGCTA  204840
CTTGGGAGGT TGAGGCAGGA GAATTGCTTG AACCCGGGAG GTAGAGGTTG CAGTGAGCCA  204900
AGATCATGCC ACTGCACTCC AGCTTGGGCA ACAGAGTGAG ACTCCATCTC AAATTAAAAA  204960
AAATACACAT CTGGCTTCTG GAAAAATTAC TTGAAGATCT TTTATGACAT CCATCCCTCT  205020
TCACACAGCC ATGTGAATTA GGTTGGTATC TTCATATACT AGCATCGTGC CCAGCACTTC  205080
CATGTTATAC AGTTTAAAAT GTTCTGTAAT TCCCTGTGGG AACCTAAGAT AATGCGAGGA  205140
CCGTCATACG TGCCCCCAAA TATTGGCAAA CCAATGAATA AATGAATGAA TGAGTTTATG  205200
AATCGCTAAC TGGCTGTATT TAATGAAGTA TGTGTGTTGA GCCATTTCCC ACAGTGTGGA  205260
CAGATTTGTC CCACAATATG GGCCTCTTCC CAAAGGCCCT ACCACCTAAT GCCATCACAC  205320
TGGGGATTTG ATTTCAACAT GTGAATTTGG GGAGAGTGCA AACACTCAGA CCATAGCACC  205380
ATCTCAGTAA ATGTCCCACT GGTCACTCAG TTCATAGTGA CAGTGATCCA GCCACTGTCA  205440
TGACAGGTGC CACTTGGCAG AAACAGCACA GCTTGGAAGA TGGCGGGGTG TAGTCAAGAT  205500
TCCAGGATCC CCAACAGAGA AGCCAGCTCT TATAGGGGAG CCATTCATCA GGATTGAACT  205560
CTCAATCGAG CTGGACAGTA ATAGGTGGGT CTGTGTTATT CCCCAGATGA GTATCATGAC  205620
AGTCACAATC CTAGGAAGGA TGTGAAGCCT CCCCCAGCTC TCCTCCAGTT GCCTGCTTGG  205680
GCAGCAGAGA TGATGGAATG TGGAGTCTGG CGTGGTCTGA GGCCTGAATC CATGTGCCTC  205740
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FIG. 6.78

ATGTATGATG CTCAGGCAAG AGGATCTCTC AATTCAAGGG AGAGGGCCTG AATGAGCCTT 205800
GCTTTCCAGG CCTGTCTGAT GGTCCAGGCT GAAGCCCCTC CTGGCTTGCA CTGCCAGACC 205860
TCATCCAGCA GGAGCTCCTT GGCATTGACT GCTTCAGGAT AGTTGCTTCT GCTCTGAGTG 205920
CTCTCTAAAG AGCAGTGCTC TACCATCCAA GCTGGGCTTT TCTTTTCTTC TTGCTGATAG 205980
GGAAGGCATG GGACATTGCA GGATGGAAGT GGCCCCCAGG CCTTCTCATG CCTGGGCTTG 206040
GTTTGGAAGG TGGTCAGGTG ATCAATAATC CTGATTGGCC TGGCATTGAG GAGTTTTCCT 206100
GGGATGTGGT CCTTTCGGTT TTTTAAAAAT TATTTTTATT GATACACATA TTTGTAGGTA 206160
TTTGTGGGGT GCATGTGATA CTTTATTATG TGTGTGGATT GTGTAATGAT GAAGTCAGGG 206220
CATTTAGGGT CTTCATCACC TTGATTATCA TTTCTATGTG TTGAGAACAT TTCAAGTTCT 206280
CAGTTCCAGC TATTTTGAAA TAGACAGTCC ATTTTGTTAG CTACAGTCAC CCAACCCGGC 206340
TGTCAGACAT TGGAACTTAC TCCTATTGAA CTGTGTATTT GTACCCATTC ACCAAACTCT 206400
CTTTGGGCTT TCAGTTTTAC AACTGGGATG ATCCTGGGAA AACTAAAGTA AATCAGACAC 206460
CCGACGTGTG AGCTAGGTTA TAATATGCCC AGTGGACCCT GGGGACATCT TAGCTTTCAG 206520
AGGTCATGCT GTCCAAGCTG ACTGTGGGGC TTCCAGAAGG TGGGGAGAGG AAATGATGCA 206580
ATGGCCCATC AGAGGCACTA CTTGGGGCCT GGGGCCAGAG TGCATGTCTA AGGCATTAAG 206640
GGGAGGGGAG AGCAGCCTTC ATAATTATGA AGAGGAGTCT CAGGTGCACA GCTTCTGATG 206700
AGGGACAGCT TCTAATTGAA GACAGCATTG TGTAATGCTC AAACTCCCTG TCTTCAGAGT 206760
GCCTGCTGTA TCCCACCATC AGTTCTGTGA CTTCTCCCTA AGCCTCAATT TTGCATGTGT 206820
TACATTGGGA TAATAATAGT GCCAAACTCA TGGGGTTGTG AGGAATAATG AGGTAAAGCA 206880
ATTGAAAAGG TTTAGCACAA TATAAGTGCT CAATAAAAGC CATTATTATT ATTTTATTAC 206940
ACTAGTTTTC AATTCCTGCA TAGCAAATTC TTGCAAATGT AGGGACTCAA AACAATATAA 207000
ATTTATTATC TGACAGTTTT TCTGGGTCAG AGGTCTTACT AGGCTGTAAT CAGAGGGCAA 207060
CCAAAGCTGT GATCTCAGCT GAAGCTCAGG ATTCTCTTCC AAGCTCACTG GTTGTTGGCA 207120
GAATTCAGTT CTTTCCAGTT GGAAGACTAA AGCCTACAGT CTTCAGTCTC TAGAAGCCTT 207180
TTCTCTGGCA CAGGTTTCTC TACAACATGG CCATTTATGT CTTTAAGGCC AATAGGAGAA 207240
CATGATTAGC ATATTTTTTT TAAGTGAACT TTAGACCCTT TTTTAAAGGC CTATCTGATT 207300
AGGCCAGGCC CAAGTGAGCT TTAAGTCAAC TGATTAGAGA TCTTAATTAC ATCTGCAAAG 207360
TCCCTTCATG TTTACCGTAT AACATAACTT AGTGAAAGGA GTGAAATTGC AACCAGGTTC 207420
TGCCTGCACT CCACGGAAGG GGATTCTGCA GAAGTGTGGG TCACGGGGGG GTTATTTTGG 207480
GATTCTGCCT ACGTCACTGA GTCAAAAGAA GCTGAATGGT TGTGATGCTG AGGTTTTTGG 207540
GCAGCAGCAG TGTGTGTGTG TGAGTGAATT CATACGTATG ACCACCTGGG AAGAAAGGAG 207600
GCTGTGGTTT CCTCCACCTC CTGGCAGACA GAGAAATTTC TTTTTTTTTT TGAGACAGGG 207660
TCTGGCTCTG TTACCCAGGC TGGAGTGCAG TGGCTTGATC TCTGCTCACT GGCTCACTGC 207720
AGCCTCTGCC TCCCAGGTTC AAGTAATTCT TGTGCCTCAA CTCCAAGTAG CTGGGATTAC 207780
AGACACACAC TGCCACGCCT GGCTAATTTT TGTATTTTTA GTAGAGACGA GGTTTTGCCA 207840
TGTTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT CCGCCCACCT CAGCCTCCCA 207900
AAGTGCTGGG ATTACAGACG TGAGCCACCA TTAACCATTT TTCTATCTCC TGTGGGAAAG 207960
GGCACAGTGA AAGAACAGAT GAAGCTGAGA CATACAAGTG AACTCCTCCC TCCTCTCCAT 208020
TTAGACTAAA ATAGGATTAT TCATACTGAG ATTCTCCCTG GTTGCAAAGA GATAATCTGT 208080
GCAACTGGGT TTTTACAATT ATCCCTACCC TATGCTTTCC TCATCTGTCT TCCTCGTAGT 208140
CAGCTCAGGC TGCTATAACA AAACACCATA ACTGGGGGCT TTTGAACAAC AAAACTTTAC 208200
TTCTCACAGT TCTAGAGGCT GGAAATCCAA GATCAAGTTT CTGGCAGATT CGGTGTCTAA 208260
TGAGGTCCTG CTTTCCAGTT TATAGACAGT GCCTTATCGC TACCGCCTTA CACAGTGGAA 208320
GGAGAGGACG AGAAGCTCCT TGGGCTTTTT TTTGTTTCTT TCTTTCTCTC TCTCTCTCTT 208380

FIG. 6.79

TTTTTTTTTT TTAATAAGGT CACTATCTTA GTCCATTTTG TGTTGCTAAA AGGAACATCT 208440
GAGGTTGAGT AATTTATTTT ATTTTAAAAA GTGGCCAGGC ATGGAGGCTT ATCCTGTAAC 208500
CCTAATCCTT TAGGAGGCCA AAACAGCAGG ATTGTTTGAG GCCAGGAGTT CAAGACCAGC 208560
CTAGGCAAGA TAGTGAGACC CCATCTACCC CATCTCTACT AAAATTTTAA AAAATTAGCT 208620
GTGTGTTGTA AAGTGTGCTT GTAGTCCCGG CCACTTGAGA GGCTGAGGTG GGTGGAGTTC 208680
AAGGCTGCAG TGAGTTATGA TTGAGCCACT GCACTCCAAC CCGGGTAACG GGGCAAGACC 208740
TTGTCTCTAT TTAAAAAAAA AAAATCTTTA TGTGGCTCAC TATTCTGGGT GGCTGGAAAG ˙ 208800
TTCAAGATTG GGCATCTGCA TCTGGTGACA GCCTCATGTC GCTTCCAGTC ATGGGGGAAG 208860
ACGAAGGAGA GCTGGCACGT GCAGATATCA CGTGTTGAGG GCAGAAGCGA GAGAGAGAGG 208920
GGAGAGATGC CAGGCTCTTT TTAACAACCA GCACTGGGGA AACTAATAGA GTGAGAGCTC 208980
ACTGACTCCT GAGGGAGGAC ATTAATCTAT TGATGAGCGA CCTGCCTCCA TGACCCAAAC 209040
ACCTCCAACG ATACCCCACC TCCAACACTG CCACACTAGG GATTAACTTT CAACTTGAGA 209100
TTTAGAGGGG GGAAACTTAC AAACTATCGC AGGCACTAAT ACCACTCATG AGGGCTCCAC 209160
CTTCATGACC TAATCACTTC CTAAAGGCCT TACCTCTTAA TCTCATCACA TTGAGGATTC 209220
GATTTCAACT TGAATTTTGG GGGGACACCA ACATTCAGGC CATAGCATCA TCTCAATAAC 209280
TGTCCCATTG GTGGTCACTC AGGCCCCAAA CAAAGGAACC TTCCTCCATT CCTTTCCGCC 209340
CTCCCACCCA CAGTCAATCA TCCCCAAGCT CCATCAGCTC CACCTTTAAC GGCCAACCCA 209400
CCTCTGCCAC ATCTCACCAT CTCCACTGCT ATCCCTGTCA CCTGGGCCCA CCATTCTCTC 209460
TCCTGGACAG TCTCCATAGC CACCTCTGTC AGATTTATTT TATTTTTTTA TTTTTTTTTT 209520
TGAGACAGGT TCCTGCTCTG TTGCCCAGAC TGGAGTGCCA TGGCATGATC ACATCTCACT 209580
GCGGCCTCCA TCACCTGGGC TCAAGCAATC CTCCCATCTC AGCCTCCCAA GTAGCTGGGA 209640
CTACTGGCAC CACCATACCT GGCTAATTTT TTGTTGTTGT TGTTTAATTT TTAATACAGA 209700
TGAAGCCTCA CTATGTTGCC CAGGCTGCTC TTGAACTCCT GGGCTCAAGT GATCCTCCGG 209760
CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA CCGTGCCCAG CCCATCAGAT 209820
GTTAATGCTA CACGCACTTG CTTAAAATCC CCCAGATAAT TCTCGCTGCT CTTGGAATAA 209880
TTCCCACACA CCTTGGCGTG GCCATGCAGG CTCTGTGCCA TCGGATATGT CCCTGCCCCC 209940
TCTCCCAACT CCTCCTTTCG CTTGCTCGTT CACTCAGTTC CAGCCACATT GCCCTGGGAG 210000
CTGCTCCCAC CATGGGGCTT CCTAATGCAC TGGTCTCTCT CATGCAGTGG GGCCTCTCCC 210060
TCCTTTTACT CAGTGTCTCC CAGCACCCAC CTCCTCCAGA GCCTTCCCTG ACCACCACAC 210120
CTACACCTAG GCCCTTCCTC CTCCACGCTC CCTCCTCCAC CCCGGCCTCC TACCCACGTG 210180
TCACTTCTTT ATACTCGCTG CCACCTGAAA TTAGATCATT TATTTACCCC TTTATTTGTT 210240
CAGTTTGCCT TGTCCGTTAG AATATAAGCT TCCAAAGGGC AGGAGCTTTG CCTATATTGT 210300
TAGGCCGGGC ATACAATGAG CACTCAAAAA AATATTTGAT GAGTGTATGA AAGAACAGAC 210360
TGGGTTATGT AATTGTGCCT ACTTACCTAT ATGACCGTGT GGTGGGGTTT ATGGTGGGTG 210420
TGGTGGTGAT GGCTATAGGG CTATAAGCAA ATTTGGGACA GGGAGTCTAA GAAATGTTCT 210480
TAAATTTTAG TAAGCAAAGC ATCCTCTACA GAACCTGTCT TAAAACATGA AAGTTCCTTA 210540
GTGCTACCCC CAGAGGTATG ATTTGGTAGG TCAAGGATAG GGCCTGGAAA TTCACATTCT 210600
TGTTAAGATG TTCTTCATCC GGGGTTTGTT GACCACCTTT TCAGAAGATT TTTGCTCTGT 210660
AGCTGTACTA CCCAATGCAG TAGTTCGTAG TCAGTGTGGC TCCTGAGCCC TTGAAGTGTA 210720
GCTCCTCTGA ACTGAGACGT GCTGTAAATG TAAATTGCAC ACCGGAGTTT GAAGAGTTAA 210780
TACAAAGAAA AAGGAATGCA AAACATCTCA TTAATAATGC TTTACACTGA TTACATATTG 210840
AAATGGTAAT CTTGTAGATA TAGTGCGTTA AATAAAATAT ACTGTTAGGC TTAATTTCAC 210900
GTCTTTATAC TTTTAATGTG GCTACTAGAA AAATTTAAAT AACATATTCA GCTCACATTA 210960
TACTCCTATT GAACAGAGCT GATCTATAAG TTCCATGGAA GATGGCAAGT CTTCGCAGCT 211020

FIG. 6.80

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GAAATAAAGG CTGGATCCCA TTCTACGGGC TCATCTTTAG CAATGATTTC TTGCAGACGA   211080
TATTGAAAAA TGTGGCAATG AAAGTTACCA CAAGCATCAA ACCAGTCCTG CCTAAATCTG   211140
GAAAATAGTT ATCTGAGGCT GTTAGCATAT GATCATGAGA GCGTTTCACC ATGGATTTCT   211200
GATCACAGAT GTGGCACATT ATTAAAATAT CACTTTTACA GTCACCCTAG AGGCTAGGGT   211260
TATCTGAATA TGGAGAAAGA AACAGCTTGT GGAGCTGTTG TATAAATGAA ATTACTAGAA   211320
AGTAATGCAC TCAATTGCAT ATTGGCTCGG GGGGTTATTC TTATTAAAAT GTTTAGAGAG   211380
GACTTTCTGT TCATTTCTGC AGAATTGCTC TTCAAATTAA GAATTTGCTT GACACGCTAA   211440
TAGACCACAG TCCCAAGAGA AGTTTATCCT TTTTTCTTCT TATCCTTGCT AAGCACTTAG   211500
ATGCTCTGCT GATAGGTAGC ATATATTGTC TATATGAAGC TTTTGTGTTA ACATTGACTA   211560
GTCCTGCAAG TTGGCACACT CTTACTTGGC CTAAAAGAAA TCAGCACCAG GCTTTAAGAA   211620
AATCAGATGA TCTACCTAAA GGAACACAAC TCTGTCTCTC TTTTGACAAT GTTGTAAAC   211680
AAATTTTAAT GGAAATTTGC CTTAATTGTG AAGAAGTTGC TGCTAAAATG GACTTGCCAT   211740
TAATGGACTG GAACCCATTG CATAAGCAGA ATGAAATATA AGCCTTCTCA GGATTCACAC   211800
TTATAAAAAA CCATTCAGCC AATCAACAAG AGGGCAAAAG AACAAACATT TGATGTGTAA   211860
TTACTTAATT TAGTGCATAT GCATTTGGGT CCTCAATGTC AGCACTATGG CAACCAGAAC   211920
ATGGCCACAA TAACTGTCTG GAAATGTCTA TTCTTACCTG GACCCAGCAG GCCATGCCCC   211980
ACTGATTATA TAATCTCCCT CTCTCCTTGT TACGGTCTGA ATGCTTGCAT CCCTCAAAAA   212040
TTCATGTGTT GAAATCCTAA CCCCCAAGGT GATGATATTA GGAGGTCGGC CTTTTGAGAG   212100
GTAATTAGGT CATGAAGACA GCATCCTCAT GAATGGGATT AGTGTCCTTA TAAAATAGGC   212160
CCAAGGGAGC TCATTCACTT TGTCCACCAT GTGAGAACAC AGCGAGAGGG CACCATTTAT   212220
GCACCAGGAA ATGGGCCTTT TCCAGACAAT CTGTCGGTGC CTGGATCTTG GACTTCACAG   212280
CCTCTAGAAC TGTGAGAAAT TAATTTGTTT TTTATAAGCC ACCAAATCTA TGGTTTTTTT   212340
TATAGAAACC GTAATGGACT AAAACACTCC CTAATTATAT TTAAACTTAT CAGTGCACTG   212400
GGCAGTGACA TATTAAAAGA ATGCTGGCCA ACGTAATTGA CACCATAAGG CTGGATGATT   212460
CTTGTAATTT TCAGCCTCAG AAAAAGGCTG GGGAGAGGAG TCAGGGGAAA GGAGGTGGTG   212520
TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGGTAC GGTGGATGCC TGCTGAGAGA   212580
GAAAGAGCTA TAATAACATT CTGTGGTTCA GCTGACACAT CCTTTCTGCA TCCCCTCCAA   212640
TCACCTGGGT TAATGGGGAC CTCGCTAATG TCTGAACCTC ATCTCATTTT AACCTTTTGT   212700
TTCAAAGCCT CTCTTTTCAT GACTTCCCCG CCTTCATTTT TCCCATATGG TGGGGTTATT   212760
ATTAAGACAT TAAATGAGAG TGGACAGGTA GGCAAAGGAG GTGGGTTGCA GGGGAGTTGA   212820
GGGTTGCCTG TGTACTTTTC TAGACTGTTC CACTTCACAT CAGTGAAATA TTCCCAATTG   212880
ATACTATCAT GAAACAAAGC AAATGAAATG CTGAGCACGG AGCTTCGTCT TGATGAAATG   212940
CTGAAAGAAA AGAAAGGAAA AATAAAGTAG CCATTATTTT TGCCCTTCCT CCCACCCCCA   213000
TGTTTACTAC TCTTATTTCT CTTTTGTATT GTTGTGTTGG AAGCACAGCA TCAGAAAAAC   213060
TCCCAGTTTT GAGAGATAAC TCAGTGTTTA GTTCACTTAA ACCTGAGAAA GGAGAAGAGG   213120
ATGCCACCGT GAGGTCCAGG ACGTAAAGAG GAAAAAAACA GACAAAAAAA TCCATATGAA   213180
ATGAAAATGT GAAAGAGGCG CTTTCGAGCA GATGAGTGTT GTAGATTACA GTGTTGAGAG   213240
CTGTTTGTGT CCAGAGCTGC TTGCTGCACC TGGCGGGATA AACACTGGTC TAACAGAGGA   213300
TCCTTGTTTC AAGGAGGCTG CCTTTTATTT GGGGGGACAA AATTGTTCTT GAAAGCTGCT   213360
CAGTGGTTCA AGCTACAGCA TGGTGGACTA GCAGAATGGA CTCCAGGGCC TCCGAGGAGA   213420
CAGTGACTGC TGCCAGAAAT AGTCAAGGAT AGAAAGGAAG GACTTCACTG AGGCCTGGGA   213480
GAAGATTATG GAATGGGACT GACAGCAGTG ACGGGGAGTA AAAGGGGGTG TCTGGGGGAA   213540
TTGTGCCCCA TGGTGAGAGC TAGAGGGTTC ACAAAGACTT AACCCGACGC ATCTCTCTCA   213600
CCCTGGAGAT TGGGCCCGTT CAATCTAACT GGATGGCTAT AATTTAAAAG GTTTAGGTAT   213660
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FIG. 6.81

TATGACAAAC ATGGATATAT TAGGTGATAG CAATGCAAAA TGCATATGGC TTCTTGATAT   213720
AAAACACAAG ACTTGAAAGC AGCATCTTTG GCTGGGTACT ACAGCCACCC TCCTCTGTCA   213780
CTAAGGGAGG CTTTGGTGGA AAGGGCTGAG AGCCTCTAGA CTGTGAACAA AAGTAGGCAC   213840
AGAAGAACAG TTGGAGATAA TAAGTAAACC ATCTTGACAG GAATGAAGAA TTTCCTGAAA   213900
GGAAGGTCCC TGAGTTAGGT TGTTGGATGC TTTCAGTAGT GAGTTATTGA AAGTGTTTGG   213960
GGGGTGTGTG TGTGTGTGTG TATGTGCAGT ATGTGTGTGT   214000

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FIG. 6.82

Amino acid sequence of FLAP (>alox5ap_protein translation NM_01629)
MDQETVGNVVLLAIVTLISVVQNGFFAHKVEHESRTQN
GRSFQRTGTLAFERVYTANQNCVDAYPTFLAVLWSAGL
LCSQVPAAFAGLMYLFVRQKYFVGYLGERTQSTPGYIFGK
RIILFLFLMSVAGIFNYYLIFFFGSDFENYIKTISTTISPLLLIP
(SEQ ID NO: 2)

MRNA of FLAP (NM_001629_mRNA)

Acttccccttcctgtacagggcaggttgtgcagctggaggcagagcagtcctctctggggagcctgaagcaaacatgga

tcaagaaactgtaggcaatgttgtcctgttggccatcgtcaccctcatcagcgtggtccagaatggattctttgcccataaag

tggagcacgaaagcaggacccagaatgggaggagcttccagaggaccggaacacttgcctttgagcgggtctacactg

ccaaccagaactgtgtagatgcgtaccccactttcctcgctgtgctctggtctgcggggctactttgcagccaagttcctgct

gcgtttgctggactgatgtacttgtttgtgaggcaaaagtactttgtcggttacctaggagagagaacgcagagcacccctg

gctacatatttgggaaacgcatcatactcttcctgttcctcatgtccgttgctggcatattcaactattacctcatcttcttttttcgg

aagtgactttgaaaactacataaagacgatctccaccaccatctcccctctacttctcattccctaactctctgctgaatatgg

ggttggtgttctcatctaatcaatacctacaagtcatcataattcagctcttgagagcattctgctcttctttagatggctgtaaat

ctattggccatctgggcttcacagcttgagttaaccttgcttttccgggaacaaaatgatgtcatgtcagctccgccccttgaa

catgaccgtggccccaaatttgctattcccatgcattttgtttgtttcttcacttatcctgttctctgaagatgttttgtgaccaggt

ttgtgttttcttaaaataaaatgcagagacatgtttt (SEQ ID NO: 3)

FIG. 7

SNP name   SNP amplimers

SG13S421

GATTATATCCCACCTACCACTGCAGCTCCAGGATCCAGCTTCACAA
ACATTTGTTGAATGAATGAATAAGAAAAGAGGACACCCCCAAAGAGGCT
GCAAGGGAAAAAGCTACAAAGACAGAAGCACCAGGAAAAAGTAGGGTC
ATGTAAGTCAAAGCAGGAAAAAAGTTCCATGGTGGGGTGGTCAGCAGTGT
CTAAT[A/G]CCACGAAGGCACAAAGTAGGATAAAGGTTAAAAATCAGCCT
TTGGTTTTGGCAAATATGAAGCTTATCGGTAGCCTTAGCGAGAACAATTCC
ATCAGGGAGCAGAAGCTAACTGCAGTGGGTTGAGTCATCAAGCAGGCAT
AAGGAAGTAGGGATACCCCATTATAAGCTACTCTTTCAAGAAGCTCAAAT
CTGAAG

SG13S417

ACAAAAATTACCATCATATGCTGTCATGCATGTCTGCCAGTCTATTT
ATCATATTATTTAAGAAACAAACATTTATTGAAGATTTATCATGTGCTCAG
CACTGCCAAAGAGGAAATAAAGAGCATAATATCTATTCTTAGAAAATAAC
ATTAACACAAATAGAAAACAAGAAACCATAATGTTAAAAATATTACATAG
[C/T]AACACAGAAAGACAATGTATAATTATACATACGCACTAAAGCAAAG
ATAACATAATTTATAAATTATGAGGTACAGAATAGTTAGATTCTGAAAAT
TAAAATAATCAGGAAAAACTTCATGAAGATGAGATCTGGGCTGGATCCCA
AAGGATAGGCAGGTGGATCATGTAGAACAGGGGAAAGGAGTTCCTGATC
GG

SG13S418

AACTAAAGAAAGCCACAAAAGTTCACCTCAATGCCAAGACATTTCT
TGATTTTTGAAAACCCAGTTGTCGAACCACCCATCTATAGAAACTTGAAA
GACTAAAAACTATCTTACTCTAAACATTTTCTAGGAAGTTGATTCTACAAC
ACATTTTGGTTTTCCAATTTGGCTTCTAATAATTATTTCAAAGTTTCTGTG[
A/G]CCTAAATTTTGTTTTACATTGATCCTTTGAATGGACTACTGTTTCCACA
TTTTAGAACATTTAAAAAGATATCTACAACCCGAGTCTAATCATAAAAAA
AATCAGACAGATCCAAAATGTGGAACATTCCACTAAAAAAGGAGTGGGG
AGAGGTCTTTATTCTTCCAAAAATATCAATGCCATAAAAGACAAAGACG

SG13S44

ACCCTTCAACCCCAGCCCAGCTGCTAACTGACTACAGCCACATGAA
CAGAACCAGGTGAGACCAGAGGAAACTTCCAGTCACCTACCAGATCATGA
CAAATAATAAACGATGTTTTTTAAACCACAAAGATTTGGAGCAGCATTTG
TTACACAAAATTAGACAACTATTACAGTTCGACTAAAAACATGTTCATTTA
C[A/G]ATACTAAATTAGAAGTGTAAGAATGGGAGAAAAACTTCATACTTTA
AAAGTCATTTTTTCCTCCAAAAACTTCCAACTTTGAAAAACTGATTTTTAT
AATGCATAAAAATTAAAATAACCTTAGAATTTATATGAGTAGCATAGCCA
GCTGGCTTTATTATCTGTTGTACTCAACACTTCAATAATCACTGATGTTT

SG13S45

ATGACCTTACCTCGTTTTGTTTTCCTTGTCTGAGAGAAACACATTAG
CAGTCTCCCATCTTGTTTTTCCTTTTCCTGTCACCCAGGACAGAGGGCAGT
GGTGTGATCACAGCTCTGCAGCACGACTTCCCCAGGTTCAGGTGATCCTCC
CACCTCAGCCTCCCAAGGAGCTGGGACCACAGGCACATGCCACCACGTC[
C/G]AGCTTAATTTTGTATTTTTTTGGTAGAGATCAGGTTTTGCCTTATTGCC
CCAAGCTGATCTTGAATTCCTGGGCTGAAGCAATCTGCCTGCCCTGGCCTC
TCCAAGTGTTAGGATTACAGGTATAAGCCACCGTGCAGCCTTATATTTTGT
TTTAAATTTTCCTCTGTATTTTTCTCTCTGGCAAATTGTTTAGGGA

FIG. 8.1

SG13S46

TTTTTTGGTAGAGATCAGGTTTTGCCTTATTGCCCCAAGCTGATCTT
GAATTCCTGGGCTGAAGCAATCTGCCTGCCCTGGCCTCTCCAAGTGTTAGG
ATTACAGGTATAAGCCACCGTGCAGCCTTATATTTTGTTTTAAATTTTCCTC
TGTATTTTTCTCTCTGGCAAATTGTTTAGGGAGTTTCTTTAGTTTATC[A/G]
GACTAAATTTCAAGGCTTTCCTTCCAATTTTGACATGTAAACAGTCCCTCA
TTTCTGCTTATCTAGTGATTATTCCCAAATCTGTGTTTACAGTCTAGCTGTC
TCTCCTGAGATTAAGACTTGTTTCTCTAACTACCTGACGGCAGAATCTCCT
CTTGGAAGTATCAAGGAGGCAGTTCAAAACTGAACTGGGCATT

SG13S50

GCTGATCTTGAATTCCTGGGCTGAAGCAATCTGCCTGCCCTGGCCT
CTCCAAGTGTTAGGATTACAGGTATAAGCCACCGTGCAGCCTTATATTTTG
TTTTAAATTTTCCTCTGTATTTTTCTCTCTGGCAAATTGTTTAGGGAGTTTC
TTTAGTTTATCAGACTAAATTTCAAGGCTTTCCTTCCAATTTTGACATG[C/T
]AAACAGTCCCTCATTTCTGCTTATCTAGTGATTATTCCCAAATCTGTGTTT
ACAGTCTAGCTGTCTCTCCTGAGATTAAGACTTGTTTCTCTAACTACCTGA
CGGCAGAATCTCCTCTTGGAAGTATCAAGGAGGCAGTTCAAAACTGAACT
GGGCATTGGCTCCACTCCTTCTCCTTCTCTTTACTATTAATACCC

SG13S52

TAAGTCTTATTTAGGCATCGTTTCTTCTGGGAGACCTTTGTAGAATC
TCTGAGGTTATGTTAACATGCTAAGGTTTTCTTGACATTCTCAGATTGGGT
TAGGTGAACTTTTAGCAACTTATCTTTTTACTAAAAAGTCATCCCTCAGTA
TCTGTGGGGAATTGGTTCTAGGACTCCCTAAGGATATCAAAATCTGCAT[A/
G]AGCAGCCCAGGTGAGACCAGCAGAAGCACTTTACAGTCACCTACAGGA
TCATGACAAATAATAAATCATGTTTAAGCCACAAAGTCCTTTACATAAAA
TGGTATAGTATTTGCATATAACCTACACATCTTCCTGTATCCTTTAAATCAT
CTCTAGTTTATAATACCTCATACGATGAAAATACTACGTAAATAGTT

SG13S53

AAGCAGTTCCTAATTACTGGACATTCTCAGATCTGCTAGAGCTACA
TGTCCAATTACGAGAATATACTGGAAAAGCCCTGGATTAGAAATGAGAG
GATGTAGGTTTTAGTACCAGGTCAGCCACCTTGTTAATGCAAATTTGAGTA
AATTGTTACTTCTTTTAGGCCTTGTTTTTGCTGTTTTGTTTTTCTGACAGT[A/
C]TGGTCTCTGTGGTCCAGGCTGGAGTGCAGAGGCACAATATCAGGTCCCT
GCAGTCTCTACCTCCCAGGATCAAGCCATTTTCATGCCTCATCCTCCTGAG
TAGCTGGGATTACAGGCATGTGCCACCACACCCTCGAACTCCTGACCTCA
AGTGATCTGCTTGCCTCAGCCTCCCAAAGTGCTGGGATTAGAGGTGT

SG13S55

GAATATACTGGAAAAGCCCTGGATTAGAAATGAGAGGATGTAGG
TTTTAGTACCAGGTCAGCCACCTTGTTAATGCAAATTTGAGTAAATTGTTA
CTTCTTTTAGGCCTTGTTTTTGCTGTTTTGTTTTTCTGACAGTATGGTCTCTG
TGGTCCAGGCTGGAGTGCAGAGGCACAATATCAGGTCCCTGCAGTCTCT[A
/G]CCTCCCAGGATCAAGCCATTTTCATGCCTCATCCTCCTGAGTAGCTGGG
ATTACAGGCATGTGCCACCACACCCTCGAACTCCTGACCTCAAGTGATCT
GCTTGCCTCAGCCTCCCAAAGTGCTGGGATTAGAGGTGTGAGCCACTGTG
CCTAGCCTTACACATTGTTTTCTTACTGGTAAAGTGGGAATATCTAGA

SG13S56

GTTTTGTTTTTCTGACAGTATGGTCTCTGTGGTCCAGGCTGGAGTGC
AGAGGCACAATATCAGGTCCCTGCAGTCTCTACCTCCCAGGATCAAGCCA
TTTTCATGCCTCATCCTCCTGAGTAGCTGGGATTACAGGCATGTGCCACCA
CACCCTCGAACTCCTGACCTCAAGTGATCTGCTTGCCTCAGCCTCCCAAA[

FIG. 8.2

G/T]TGCTGGGATTAGAGGTGTGAGCCACTGTGCCTAGCCTTACACATTGTT
TTCTTACTGGTAAAGTGGGAATATCTAGAAGTTGCATGCTACATAAATTCA
ACCATATATTATTGGCAAAAAATTTTAAAGAAAAACATCAGCTTAAGAGT
ACTAATTGAGTACATGCCTTGGAATGAGCATGAGCTGGAAAGAACAAA .
SG13S57

GGCAAAAAATTTTAAAGAAAAACATCAGCTTAAGAGTACTAATTG
AGTACATGCCTTGGAATGAGCATGAGCTGGAAAGAACAAACCTGTTGTTA
CATCACTCATTGCTGTTTTCATATGCTGCTCATTGTAAATCTTGCTCAGTGG
CATGATTTTAGTGTTTAAAGATTTATTTGTTTGTTTGTTTAGGACAAAGTC[
C/T]CTACACATAATCTACTTGCTTCATATATACATACTTATGCATATTATGT
ATGTACATACATGCTCTCAGGGCTCACATGAAAAAACAGCCATTCAGGTG
ATGTGATTTATCTCATATGCTTACTTTAGAGTCAACAGGGTGTTGACTCCA
CTATACAATACTGGCATGGAGAACACATAAGTCAAAGTAGACAGGAC
SG13S58

TTTATTTGTTTGTTTGTTTAGGACAAAGTCTCTACACATAATCTACT
TGCTTCATATATACATACTTATGCATATTATGTATGTACATACATGCTCTC
AGGGCTCACATGAAAAAACAGCCATTCAGGTGATGTGATTTATCTCATAT
GCTTACTTTAGAGTCAACAGGGTGTTGACTCCACTATACAATACTGGCAT[
A/G]GAGAACACATAAGTCAAAGTAGACAGGACCCAGCCGTACCATTGGCT
AGGGCACAAATATATTCACATATGTGGAGAATGATGTACGTAGAAAGGTC
TTCATTGCACAATGCTCTTTAATAAAGATCTGGAAAAAAAAAACACCTAA
ATGTTCAAAAGGATAGGGTAGATGAAATAATGGTACATTATAAAATGGAA
SG13S59

TCTGTCACCCAGGCTGGAGTGCAGTGGCATGATCATGTCTCCTTGC
AGCCTTGACTTCCCTGGCTCAGGTGGGCCTCCCACCTCAGTCTCCCAAGTA
GCTGGAACTACAGTCGTGCACCACCATAGCCAGCTAAGATAGTGAGATGG
TGGCCCCACTGTCTTGCCCAGGCTGGACTCGATTTCCTGGGTGCAAGCACC
[C/G]TTCCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGTCAC
CATTCCAGCCTACTTGTCTTTAATTCTTAAAAATATTAATGTTGAGTTTTGT
CTCCCAGCATGTGGGAAAGATGTCATCCATTGCTTCTGTTTCCTGGAGGCC
TGGGAGCAAGGAGCCCAGGAACAGTATCACGAAGCTTGAGATAATAC
SG13S60

ATCATTGATGGGCATTTGGGTTGGTTCCAAGTCTTTGCTATTGTGAT
TTTTTTTTTTTTTTTTTTTTTTTAAGACAGAGCCTCACTCTGTTGCCCAGGC
TGGAGTGCGATGGCATGATCTCAGCTCACTGCAACCTCCGCCTCTCAGGTT
CAAGCAATTCTTCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGC[A/G]
CCCACCACCAGGCCCAGCTAATTTTTGTATTTTTAGTAGAGACAGGGTTTC
ACCATGTTGGTCAGGCTGGTCTTGAACTCCAGACCTCATGATCTGCCTGCC
TTGGCCTCCCAAAGTGCTGAAATTACAGGTGTGAGCCACCATACCTGGCC
TAGGCAGTCTTTTTCAAAACTCTAAGACTGTGCTTGTGTCTCAGG
SG13S419

TGGTATGAGGTAAGGATCCATTTTTTTCCCATTTGCATAGCCAGTTT
TTGTAGCTCCACTTTATTTTCTCACTTGATCTGCCATGCCACCTCTAGCATG
TATCAACATATCATGTATGTGTGCAGCTGTTCCTTAACTCTCAATTTTATTC
TCTTGGTTACTTTGTCTAACCCAGCACTCATACTTTTTAAATTATTA[C/T]G
GCTACCTTGTAGGGCAAGAATCCTCACTTTTATTCAACTTCTTTTGAAGTG
TCTTGATGCATATTTTTTCTGATCTTACTTGGCCATATATATTTTGGGGACA
GATGTGACATCATACCAAGCTTTCTTTGCTTGACATTGTAGATATTTTCTTA
TTCATTAATGTGCTAAAAATTTTGAGTTTGGTCATACAGTC

FIG. 8.3

SG13S61

GTTTCTAACATTATAGACACTAGTTTTAGGCTCTTGGAGGCTAGCA
GCAATTCTCAGAGGTAATGCAAGCTTCCCCATTTCTTCCCGTAGTCCTGTG
AAAGACCAGCCACCTCCAGAAGCCTACACATGAGTCTTCTCAGCCATACT
TTCTGCTTTTCCTAATGCCTCTCAGCAGCGTATTAGAAAGGCCATGATCGA
[C/T]GTACCTGTTACCTTCAGGCTTTGCATAAGGTGTATATGAAACATAAT
GAATTTCGTGTTTAGGCTCAGGTCCCATCCCCAGGTTACCTCTTTATCTTG
GAGACACTTCTGGTCCCATACATTTCAGATAAGAGATATTCAACCTGTACC
CACCACGTAAGGAGAGGAATAGGTTTTAGAAGAGGAGTCAGGGAGGCA

SG13S62

GCATCTATTAAAAGTGATGGTTTTAGTATCCTGTCTCATTTTTTCCT
TTCCTTACATCATGTATTATAGGTAAACACATGCGCATGTGTGTATTTCTC
TTTTAGACAAAGGATGAGATTACTACTGTTAGCTCAGTTTTTTTTTCCCTAC
TTAACATCTTTGCTTTTATTTTTTAGACATATTTCTAAGACTATTAAA[C/T]A
TTAGACTTACGTAGCCCTTCTGTCATTGTGAAATACATAGTTTACTAACAG
CTACCATCAAGATAAAGCCTTTATTTAAATAATTAAACTTCTTAGTGGAAA
GCTAAGTAAGCACAGTTTATGGATTTTGGGAATTTTTGCCTTGCATTTGTC
TGATATGGTAAAATATTGAGTTTGTTTTTCTCATAATGTTCAC

SG13S63

GATAACTCAATCCCCTTAAAGGGTTGTATCAAGCCATTGATAAGGG
CTCACTTTGATATAACCATTTTCTGTTATTTAGACACTCTTTCACACTTCCT
ATTTTCCTCCTGGGGATGGTTTGAATGGATGACACAATACCATATTATAAA
AGCACTTTACAAACTGTAACTTATGTTATAAATGTAATTATTACCTTAA[A/
G]GTTTTACCCTGTTTCAGATTTGAGTGGAAGTAGTTCTTTACAATACAAA
ACAACTTATTTTAACTTTTTTTGCATTTCAAAGAATGATCAATCCACTTCA
GGTGCAGCATGGTTTCCAACCCTGACAGCATGGAAGAATCATTTATTTAG
CTTCTAAAAATGTGCAGGCTGTACCCTAGACCAGCCTTGGGGATTAG

SG13S64

TCCTCTCTCTCATTCTCTCTCTCTCTCTCTTTCTCTCTCTCCTTCTTTG
CTCCTTCATTCCTTCTCTCTCTCTCTTTTTTTTTGAGACAGCATCTCACTAT
ATTGCCCAGGCTGTTCTCAAACTCCTGGGCTCAAGTGATCCTCCTGCCTCA
GCTTCCTGAGTAGCTAGGACTACAGGCACATGCTATGGCAATACT[A/G]TT
.TTAAACATTGTTTTCAAGGCTCCCCAGGTGATTCCAGTGTGGGTCATGTGG
TAGAGAACCACTGACACAGGCAAACAAAGGATACATAAAGTTGTCTATTT
AATGGGTAGGTGCAGGTAGTAGATAAGAGTGTAGCCACATAAACCACAT
GCTTAGTGAACGGTTTTGTTTTGTGTGTATGTGAGGGATTAGCAT

SG13S65

TTCAGGTTCCATTTAGCACGACAGCAGGGAAGGGACTGTTGGCAG
AAAAAAACTGGGGCAGTGGGATTAAAGACAGACCACACATTCCAAAAGG
CACCGTGGGAGGGTCAGGGGGCGAGGTTAGGTCTAGGCTTCAGTGTCCTG
GGAGACTCAGTCTTCACAGGGTGACAGCGATCAAGAGTGCAGCTTAGGCT
GGGT[A/G]CAGTGGCTCATGCCTGTAGTCCCAGCACTTTGGGAGGCCGAGA
CGGGAGGATTGCTTGAAGCCAGGAGTTTGAGACCAGTCTGACCAACATGG
CAAAACCCCATCTCTACTAAAAATACAAAAATCAACTGGGCATGGTGGCG
TGTGCCTGTAGTCCCAGCTACTTGAGAGGCTGAGGCAAGAGAATCACTTG
AACC

SG13S420

TAAATGATCATTATGTTCATATTCACACATACAATAATGTACTCAA
GTTTATTGCTAAGGTAATTCAGAATCTCCTTATTTTGAAGTGTGCATTTGA
TATACCTGTTTGGGAATAACTAGTTTCTTATCTTTGACAGAAAATAATTTT

FIG. 8.4

GTTGTTTTGTTTTTACTAAAAAAGCATGGTGAAAAATGGCTCCATTTCTA[A
/T]GAGAGGTAACTAAAATATCGCAATTTGCTGGGTGTCATTAAAGTAACT
CACAAGGGAAAAAATGCAAATTGGTATCTGCTGATGGAGTAAATCTCCGC
AGAAGTGATGACCCTGAAAGGATCAATATATTAAAGCCCCTCCCAGCTGG
TCATTCCAGATTGCAACAATAAAGCATTAAGTGTTAAAACCTCAAGGCA
SG13S66

    CTCATCAAGCCCACCTTTATACTTCATTTCTCCAGACTTCATGTCCA
GACTGTGGGATGAACAAGTGGTTATAAGGTTTTAGAGGCTCCTGTAGGAC
TAGATGGAAGGCAAAAAAGGAAATAACCTTTAAGCATGCTCTCGATTCC
TTAAATCCCATCTGAAAGTCTTAAGGATGTCTTCTCAGTCATACTTATTTG[
A/G]CAATATTACCTAATTTTCTCCATTAGCCCAAGCTCAGGGGTCTTTCTT
CTTCCATATTCACATGGGTGCAATGGTTTTCTGAAAGGAAAACAGCATTA
CTAGGGCAGTAACATTTAATTAATCACAGGTACTTATCAAACTACAAAC
AGGCATTCCAGGAACTGGGTGTTCTGTTTGTAAAATTACACTCTCGTG
SG13S67

    TAGGACTAGATGGAAGGCAAAAAAGGAAATAACCTTTAAGCATG
CTCTCGATTCCTTAAATCCCATCTGAAAGTCTTAAGGATGTCTTCTCAGTC
ATACTTATTTGACAATATTACCTAATTTTCTCCATTAGCCCAAGCTCAGGG
GTCTTTCTTCTTCCATATTCACATGGGTGCAATGGTTTTCTGAAAGGAAAA[
C/T]AGCATTACTAGGGCAGTAACATTTAATTAATCACAGGTACTTATCAAA
CTACAAAACAGGCATTCCAGGAACTGGGTGTTCTGTTTGTAAAATTACA
CTCTCGTGTACATGCTCCCACTAAAATGTAAGTTCGCTGAGGATGGAGGTT
TTGGTCTCTTTGCTCTGTGCTGTAACCCCAACACTGCAGCAGGGCCTG
SG13S69

    GCTGCATAGTCTCACTTAGGTGTGGAATCTAAAAAAGTCAAATTAA
AAAAAAATGTCAAGCAGAGAATAGAATGGTAGTTGCCAGGGACTCTGGG
AAGTAGCAGGGGTGGGGGTGGAGGGGAGGGGATGGGCAGAAGTTGGTCA
AAAGGTACAAAGTTTCAGGTAGACAGGTGTAAGTTCTGGGGATCTATTGT
ACAG[A/C]GTGGTGACTGTAGTTAATACTGTATTGTGTACTTAAAAATTGC
TCACCAAAAATGTTCTCACCAAAAAAATGATGTTTGGATATGTTAAACAG
TTTGATTTAATCATTTTGACGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
GTATACATCAAAACATCACATTATATACCATATACAATTAATATATACAAT
T
SG13S70

    GGGGTAAATGCTGACTGCCTGTTCTCTGGACAGGAATGGAGAAGA
TGGTGCTAGCAGGGTTGCTGTTCATATGTAGACATTCATGCAGTCACTCTC
TTTTCAGCACACTTCTTACTTCTGCCCTGGGTTCAGTTGCTGACTCTGAGCC
CAGAAACCTTCTAGGGTTCTGTTAGGTAGATTGGCTTCCACCGTCTTTGC[
A/G]ACAACCACAGAAAATTCTAGACTGTTTTCTCTTCGGGCTTCATTAGTC
AACTTGCTTCAGTCTGTCTTGCATCTTCTAAATATTTATAGATCTCTCTCTT
TTGTTGGAGTGGCAGAAAATGCTAGTTGACCACCCAATATTCAAATTATC
CTGCCTCCTTAATAACAGAATATCATTGGATGTGGTGGGTAAATAAT
SG13S71

    ATGGAGAAGATGGTGCTAGCAGGGTTGCTGTTCATATGTAGACATT
CATGCAGTCACTCTCTTTTCAGCACACTTCTTACTTCTGCCCTGGGTTCAGT
TGCTGACTCTGAGCCCAGAAACCTTCTAGGGTTCTGTTAGGTAGATTGGCT
TCCACCGTCTTTGCGACAACCACAGAAAATTCTAGACTGTTTTCTCTTC[A/
G]GGCTTCATTAGTCAACTTGCTTCAGTCTGTCTTGCATCTTCTAAATATTT
ATAGATCTCTCTCTTTTGTTGGAGTGGCAGAAAATGCTAGTTGACCACCCA

FIG. 8.5

ATATTCAAATTATCCTGCCTCCTTAATAACAGAATATCATTGGATGTGGTG
GGTAAATAATATACCCTAACTTTCCTTGCAGAGAGGGGTGGCCAA
SG13S72

CAGGGTTGCTGTTCATATGTAGACATTCATGCAGTCACTCTCTTTTC
AGCACACTTCTTACTTCTGCCCTGGGTTCAGTTGCTGACTCTGAGCCCAGA
AACCTTCTAGGGTTCTGTTAGGTAGATTGGCTTCCACCGTCTTTGCGACAA
CCACAGAAAATTCTAGACTGTTTTCTCTTCGGGCTTCATTAGTCAACTT[G/
T]CTTCAGTCTGTCTTGCATCTTCTAAATATTTATAGATCTCTCTCTTTTGTT
GGAGTGGCAGAAAATGCTAGTTGACCACCCAATATTCAAATTATCCTGCC
TCCTTAATAACAGAATATCATTGGATGTGGTGGGTAAATAATATACCCTA
ACTTTCCTTGCAGAGAGGGGTGGCCAATGAGATGGAAATGAAAGTC
SG13S73

TGGGATTGAGTTCTTGATTTGATTTTGAGCTTGGCCATCATTGGTGT
ATAGCAGTGCTAGTGATTTGTGTACATTGATTTTGTAACCTAACACTACTA
AATTCACTTATCAAATCTGGGAGATTTTTGAGGATTCCTTAGGATTTTCTA
GGTATGAGATCATATCATTGGTAGAGGTAGTTTGAGTTTCTCTTTTCCA[A/
G]TTTGGATGCCCTTTATTTCTTTCTCTTGCCTGATTGCTCTGACTAGGGCTT
CTAGTACTATGTTGAATAGAAATGGTGAAAGTGGGCATCCTTGTCTCATT
CTAATTTTTAGGGGGAAATGCTTTCAACTTTTCCCCATTCATTTTGATGTTG
GCTGTGAGTTTGTCATAGATGATTCTTACTATTTTGAGATATA
SG13S99

TCTTTTGCCCTGCCTTTCTGCCTTTCTGTCCTTTTAATTTGCGGGCTT
TTGGCAACCACAGCACGGGTCTGGTTTCCTAGGAGTTTCTTTTGTAGGATC
AAACCGCTAGTTGGCTCTTGGCCCTGTGATAGGGCCCTGGGCTAACTTATT
GGGAAAATGTTGCTGTAACCCCTGCCCAGAGGTGCCTGTGACATGGGC[C/
T]GCCATCTTCTCCTCTTCCCTTGGCTTCAGCCCCACCTAGAAACCTGAACA
AACATTTTCCTTGACATTTCATAAGTGTCAGTGGCTCCTCATTTAGCAAA
ATACATCCCAGGGAAGTTCAAAAGTGAAAAAGGCCGTAACTTCTTCTTC
TTCTCAGGGACCTACAGAAAATATGTGGCACCTCGGCAGCCTGGCC
SG13S382

CATGGATTTTGTTTTCCAAGTGGCAAGATGGCGCCTCCACCTTTGGT
ATCCTATTTTAGTTCCTGGCAGAAAGAAAGGAACAGGCTAATGGCCCTGA
TGAGTCTACCCCCTTTTAACAGGAGAAAATTTAAAAAACAAAAACCATGA
AACCCTTTCCCAGAGGCAACAACCAGAATTCCATTTATCTTTCATTGACCA
[A/G]AACAGACCACATGGTCACTGGTGGTGGCAATGGAGACTGGGGAGAT
GAATATTTTTAAGGTGGCATATTCCAGAAGAACACTGTGCACTGATTGCAT
TAATGAACCCATTAATGTGCCAAGGGGAGGTTTACCTATGAGCATGGGCA
AATTAGAACCCACTCTTGGAGCTGCAGGTGAGCCAATCCCACCTAAACAG
SG13S383

TGGTGGTGGCAATGGAGACTGGGGAGATGAATATTTTTAAGGTGGC
ATATTCCAGAAGAACACTGTGCACTGATTGCATTAATGAACCCATTAATG
TGCCAAGGGGAGGTTTACCTATGAGCATGGGCAAATTAGAACCCACTCTT
GGAGCTGCAGGTGAGCCAATCCCACCTAAACAGTGTGGATGCTACAAGAT
GG[A/G]GAAGTAAATTGATTCTATTCCATACCCTAACCTCTCTCCAAGATG
TATTCTTAAAATAGAAGAGGGAAGACAGAAGAAACATCCAGAATATATT
TTTATTGTCTTTTACTTCTTCAGTGCATTTTAGATCAGTGCTTCTCAATCTG
GCAAGGGGCATGCAGGAGGATGTGAGTTTTATCAGGAAAACTACACAAC
C
SG13S384

TGAGCCAATCCCACCTAAACAGTGTGGATGCTACAAGATGGGGAA

FIG. 8.6

GTAAATTGATTCTATTCCATACCCTAACCTCTCTCCAAGATGTATTCTTAA
AATAGAAGAGGGAAGACAGAAGAAAACATCCAGAATATATTTTTATTGTC
TTTTACTTCTTCAGTGCATTTTAGATCAGTGCTTCTCAATCTGGCAAGGGG
C[A/G]TGCAGGAGGATGTGAGTTTTATCAGGAAAACTACACAACCCCCA
ACCACAATGCTACCCCCACTCCTGTGGACCTTCTTTAAGAGAGACTCACTA
TTATAGATGGAGTTGATACGATTTTAAGAGAGGCCATATATTATTTGCTTT
CTGTCTTGAAAAACTTGTGATTTTTCTGTATTGTGCTACTGCCAAAGAGA
SG13S381
        GGGTTGCAGTGAGCAGAGATCACACCATTGCACTCCAGCCTGGGTG
GCAGAGCGAGATTCTGTCTAAAAAACAACACCGTATTTGGGGCATGCTGA
TACTAAAAAATTATTCATTGTTTGTCTGAAATTAAAATTTAAATTGGGGGC
CCTGTATTTTACTGGGCAACCCATTTGCAATATCAGCAACAATCTCTTATT[
C/G]AGACCACTGATTAAGTGTGCAAAATTTGAATCTCTGAACAGTACCTA
TGTCCTTGATATCTTAAATTAATGAGTGTCTTAGACACTCAAAGCAGGAGG
AAGCATTATGGCAGATGTTTGAGCCCCAGAGATGTCCATGAGCACAGCAT
AGAGCTCAGAGCCTTCTTTATTATTTGCTTCACGACAGAGCAAAGGACT
SG13S366
        CATTTGCAATATCAGCAACAATCTCTTATTCAGACCACTGATTAAG
TGTGCAAAATTTGAATCTCTGAACAGTACCTATGTCCTTGATATCTTAAAT
TAATGAGTGTCTTAGACACTCAAAGCAGGAGGAAGCATTATGGCAGATGT
TTGAGCCCCAGAGATGTCCATGAGCACAGCATAGAGCTCAGAGCCTTCTT
T[A/G]TTATTTGCTTCACGACAGAGCAAAGGACTGCAGCAGGTTGACTGAT
ATAAAAGTTTTACCATGTCTCACAGCAGGCCTTTGCTCAAGTTTCCAGTAA
GGATATTGTATCATTTCTTGCCTGCAGTACTTGTAAATCCACTTACACTGC
CTGCTGTTGAGTCATTTGTTTCGTCTTGAGTAGCATGTCATCCTTGTTC
SG13S385
        TTGCAGTTCTCATTGCTGGGGAGTCTAAACTGGAATAAAACACCCA
CTATCTCCATCAGGCTTGCACTAGAGCCCAGCTCTAGCTGGAGAGAAAGA
AGCTAACCCGCACAGACACAGGACTGTAGGCAGGGAGCATCCGGGGGGTA
TTTGGGTCCTGGCTCTGATGTGCCTAAGGCCAACTTCTCTCTGGCCATGCT
GG[C/T]GTGCATGAGCTCACTAATCTTCCTTTTTGCCTTCCATTTTCTCCAA
TCCTGACTTAGCAAAGGTTGGGCAAAAGAGACTCTGTGTGAGTTCGAGCA
AAGCCTGAGATGCTGGATTTTCCAAGATACGAGAAGGGGCTGGGGGCTGG
GTGAACTGGTGGTGGAGGAGGGAAGGATTAATTTCCCAAGGAGGGGAAG
GG
SG13S386
        GAGAAAGAAGCTAACCCGCACAGACACAGGACTGTAGGCAGGGA
GCATCCGGGGGGTATTTGGGTCCTGGCTCTGATGTGCCTAAGGCCAACTTCT
CTCTGGCCATGCTGGCGTGCATGAGCTCACTAATCTTCCTTTTTGCCTTCC
ATTTTCTCCAATCCTGACTTAGCAAAGGTTGGGCAAAAGAGACTCTGTGT
GA[A/G]TTCGAGCAAAGCCTGAGATGCTGGATTTTCCAAGATACGAGAAG
GGGCTGGGGGCTGGGTGAACTGGTGGTGGAGGAGGGAAGGATTAATTTCC
CAAGGAGGGGAAGGGGCCAGGACATCAGGCCCCGGGGACTTTGAAGAGA
GGGTCGTGGGTAGGAGGTAGATCAAGTGGAGTGACACAAGGTCAGGAA
AGAGG
SG13S1
        CATGCCTCCTACAAATTTGACCTGGGCCCAGGGCCATGTTCGGTGG
TTTTTAAGAACCGAGGCTCCCAGAAGCAGTATTGGGCAGCTAGAGTGGCC
CCAGGATCTATATCAAACTCTACCTGTTTCTGAACCAAATTTCTTCTAGAA
TTTTATTCCATAAATCTGAATTATGGTGTCAGACTCCTAGCATACACTAAA[

FIG. 8.7

G/T]GAACTCTCTGCCTTGCATTAAATAACAGGAGTTACCCCTGGAGGTAA
CTCCTAGCCCTGGCTCTTTAGAGAACAGATGCCGAATAGGCATTAGGGGA
TGTGATGGATGTGCTAACTTTCAAAAAAAAAAAAAAAAAAAAGGCCTGAG
CTGAGTGCTCAGAGATTCACAAAAGCTGACAGCATCTCTCTGTTCCATTG
SG13S2
CTTTGGAGCCTGGCAGCCTGGCTTTGAGAACCGGGCTTTAACTTGT
CACATGACTATGGCCAAGTTCCTGGGGCTCTCCAAGCTTCACTTCCTCTGT
AAAAAGGGCAATAATATAATACCTGTCTTATTGGGTTTTGTCCATGTTAGA
TGAGACATTGGGTACAAAGCACTTGGTCCCGTGCCTGGCACATTTACTGC[
A/G]CTTAATGTATGATAGTTTTCTTATTATTCTAATAAACAATATGGCTTTG
GGAGTATAGTTCTGCCACATTGCAGTGGCCAGAGTGAAGGTGGTGAGTGC
CTTCTGGGGCCCTGGGAGTCAAGGTTATCCGCATGCCCTTTCTTGCTTGCT
CCTCAGTGTGGCTGCCTCTATGTCCACACCATGCAGATGCAACAGGT
SG13S367
ACATGATCATCCCCTTGGGCTTCTGGTTTTTTTTCTTTCAGGACCTT
ATTTTCAGGCAAGTGGCCTTTGACCTCTAAGGCTGTCCTTTCCTAGCTACC
GAATCCAGCATTCAAAGTGATGGAAATATGTATATATAGTAATAGTAAAA
TATCAGCACTTAATGGCCTGATAAGAATGTCACTGCAATGCTGAGTTTGG[
A/G]CCAACATTTGCCTGCTCCTGCCATTGAGCCCGGGCTCCCCTCCAGAGC
TGAGCTGCTGCAAGGGATCTGAGTAACTAGGGCTGTGTCAGAGTGGCGAT
GACAGCCACCACATGCTAAGGAAGAGATCCCCAAGGACAAGGAGAATCC
CACGTGGAGCTACTTGCTTCTTTGTCAGTCTTGTTTTTCTTATTTCACAA
SG13S388
CCGAATCCAGCATTCAAAGTGATGGAAATATGTATATATAGTAATA
GTAAAATATCAGCACTTAATGGCCTGATAAGAATGTCACTGCAATGCTGA
GTTTGGACCAACATTTGCCTGCTCCTGCCATTGAGCCCGGGCTCCCCTCCA
GAGCTGAGCTGCTGCAAGGGATCTGAGTAACTAGGGCTGTGTCAGAGTGG
C[A/G]ATGACAGCCACCACATGCTAAGGAAGAGATCCCCAAGGACAAGGA
GAATCCCACGTGGAGCTACTTGCTTCTTTGTCAGTCTTGTTTTTCTTATTTC
ACAACCTTCTAAAACACAATCTCTCAACCTCTATTGTTAGCTTGCATTTTT
CAATCATGAGCACAGCTTTACCTGGCTCCATGCTTTGATTGACTCTACC
SG13S10
TCTTATTTCACAACCTTCTAAAACACAATCTCTCAACCTCTATTGTT
AGCTTGCATTTTTCAATCATGAGCACAGCTTTACCTGGCTCCATGCTTTGA
TTGACTCTACCTGCCAACACTGCAACAACAGGGAAAGGGACACCGGCCTC
ATACCATTAGATGGTGTGTAGCCTGGGCATGAGGATAATTAAAAACTCCC[
A/T]AGGGGATTTTAACATGTAACACAGTTTGGAAACCATTGATGTAAGAT
CTTCTTACTCAACATGTGCTCCAAGGAGCTGTTGTATCAGCTTATCAGAAA
TGTAGATCAGGCCGCACTTGGACCTGTAGAATCAGAATCTGCATTTTATCA
GATTCCGACATTATTTGTATGAACATTAGCTTTTGAGAAGTGTTGCTT
SG13S3
CTTTTGACACCAACTACAAGTCAAGGGGTTCCCCAAACCACCCTGA
GTTGTGATAATTCGCTGGGAGATCTGACAGAACTCACTGAAGGTTGTTAT
ACTCATGGTTGTGATCTCTTATAGGGAGGGAATACAGATTAAAATCAGCC
AAAGGAAGAAGCACACAGCACAGAGTCCAGGACAGTGCCTGACATGGAG
CCC[C/T]TACGGTCCTCTCCCGTGGAGTCACGGACAGCGCCACTCTCCTGG
CATTGATGTGTGACAACACACAGGGAGTGTTCCCCACCAGGGAAGCCTTG
GTGTCCAGGGTCTTTACTGTGGCTCTGTCACATGAGCACAGCTGACTGCCC
ATGCGGCCGATCTGTTCCCAGACTCTCCACCGCTACACATCACTCACAGTC
C

FIG. 8.8

SG13S368

GTGGCTCACAGAACTCAGGGAAACACAGCTACCAGTTTATTGCGA
AGGACATTTTAAAGGATAAAAGTAGGCAGATAAAGAGATGCATAGGGCG
AGGTGTGGAAAGGTCCCTAGTGCAGGAGCTTCTGTCCATGTGGAGCGGGG
GTGCACCACCCTCTCAGTACATGAATGAGTTCTCCTTCACCTGCCTATCAG
CCT[C/T]TACATGTTCAGCTCCCCAACCCAGTCCTCTTGGGTTTTTATGGAA
GCTTCAAGACACCCACATTCTTTCCCCAGAGTATAGGGCAAGACCTTCTCT
GGGGAGGGTTTTAAGACCCACAGTCAGAAAGGTGGGGTGGGGTCAAGAT
TAGAGTCCTGCCTTGACGGGCAGGTGAAAGGGGTAGGGGGAGTAGGTGA
GAA

SG13S369

CGGGGGTGCACCACCCTCTCAGTACATGAATGAGTTCTCCTTCACC
TGCCTATCAGCCTCTACATGTTCAGCTCCCCAACCCAGTCCTCTTGGGTTT
TTATGGAAGCTTCAAGACACCCACATTCTTTCCCCAGAGTATAGGGCAAG
ACCTTCTCTGGGGAGGGTTTTAAGACCCACAGTCAGAAAGGTGGGGTGGG
G[G/T]CAAGATTAGAGTCCTGCCTTGACGGGCAGGTGAAAGGGGTAGGGG
GAGTAGGTGAGAAAAATTCTGTTTATTTTTTCTTTTTTTTTTGAGACGGAG
TTTCACTCTTGTTGCCCAGGGTGGAGTGCAATGGCACAATCTCAGCTCACT
GCAACCTCCGCCTCCCAGGTTTAAGCGATTCTCCTGCCTCAGCCTCCCG

SG13S370

ATGAGTTCTCCTTCACCTGCCTATCAGCCTCTACATGTTCAGCTCCC
CAACCCAGTCCTCTTGGGTTTTTATGGAAGCTTCAAGACACCCACATTCTT
TCCCCAGAGTATAGGGCAAGACCTTCTCTGGGGAGGGTTTTAAGACCCAC
AGTCAGAAAGGTGGGGTGGGGTCAAGATTAGAGTCCTGCCTTGACGGGCA
[A/G]GTGAAAGGGGTAGGGGGAGTAGGTGAGAAAAATTCTGTTTATTTTTT
CTTTTTTTTTTGAGACGGAGTTTCACTCTTGTTGCCCAGGGTGGAGTGCA
ATGGCACAATCTCAGCTCACTGCAACCTCCGCCTCCCAGGTTTAAGCGATT
CTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCGTGTGCCACC

SG13S4

TCTTCATTCCACAAAGCTCAGTGTCAAAACATGGGGTTTACACTGG
AAGCTGAGGTCACATCAGTAGCCGGGATCAGGGTCGCCCTAGCTGCCCAA
TGCAGCTCCCAGGCCTCCTGTAAAACCTTGACCTTTGAGGTCATGACAGCC
CTCTCCTGCTATGCTCATAGCTGACCACTGAACTCCTGGACACTCCCTCCC[
G/C]CAAGTTCACAGAGAATGTGGGCACATGCCTTACAGTCTTCCCTTGATC
CAAACTACTGCCTTCATCTTGAGTGACAGCAGCATCTTTTGGATGTCTTGG
CCTGTCTAGCTTTATTTTTTTGTGTTCTGCCATCAAGTTGCTACTTCTGTTG
CCATCGTGCCTGTCAGCGCAGTGCAGGCTGTGGTGAAATCCCACGA

SG13S5

TATTTTTTTGTGTTCTGCCATCAAGTTGCTACTTCTGTTGCCATCGTG
CCTGTCAGCGCAGTGCAGGCTGTGGTGAAATCCCACGAACTCAGGCATCA
CACTGACCGGGTCTGAGTCCTGTCTCAGTTGTCAGCTAGTTGTGCAATGAA
GGGAAAGGGACCTACACTTTCCAAGCCTCAATTCACTCATCTATGGCAT[G
/T]GTGACAATAATGGAGGTTGATTTAAAGTCCTTTGTAAGAATTAAGAGTT
ATAATAGACATAAAGTGCTGTATCTGGTATACCTAGAAAACATTCCATAA
AAGTTAGTAATTGTTGGTCATGTAATGATGACTCTCTAGGCTAGGATTTCA
GCTTCATTGCATGCACATGGTGCACTCACAGGGCGTGACCTCTCTCT

SG13S389

GGTATACCTAGAAAACATTCCATAAAAGTTAGTAATTGTTGGTCAT
GTAATGATGACTCTCTAGGCTAGGATTTCAGCTTCATTGCATGCACATGGT
GCACTCACAGGGCGTGACCTCTCTCTGTCTCAGTAACCTCATCTGAGGACC

FIG. 8.9

GGGATAATCATACCGCTTCAAAGGGATGTCATAAAGATTAAATAATATGT[
A/G]TAAGGCTGCTTGCATTTAGCTGCATTCAACAAATATTTCTGTATCTTT
CTCCTCATTTCTCCTTACTTTCTTGCTTATTATCTGCTCTAGGTATAGATTTC
AGAGAACTAAGCTTGTTACAATCCTTCATAAAATAACCAGGTTGGTTAGG
GCATTTCCAAGAGTCAATACTGTTAGTGACTATTCTCTGTTTAAT
SG13S90

AAGGCTGCTTGCATTTAGCTGCATTCAACAAATATTTCTGTATCTTT
CTCCTCATTTCTCCTTACTTTCTTGCTTATTATCTGCTCTAGGTATAGATTTC
AGAGAACTAAGCTTGTTACAATCCTTCATAAAATAACCAGGTTGGTTAGG
GCATTTCCAAGAGTCAATACTGTTAGTGACTATTCTCTGTTTAATCT[A/C]
TTTTGATTGTCCAGGGTCATCTTTTGCTATGTCATAGGTTGTTGGCTTCTTC
TAGAGAAGTGAGACGATGGACAAGTTCCAAGTGAGTGAGGCGACTGGTC
AGGATATTCCGCTGAAAAACTCATGTCAGTTCTAATTCGTGATTGTAATTC
AATCACAGCCTGAGAACAGTAGGACTGTAGTTCAAATGCTCTGTT
SG13S390

CCTGGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGG
ACTACAGGCACATGCCACCACGCCCAGATAATTTTCGTATTTTTAGTAGAG
ACGGGGTTTCCCCTTGTTGGCCAGGGTGGTCTTGATCTCTTGACCTCATGA
TCCGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACC[
A/G]CGCCCGGCCTCTAGAGGATAATTTTTAAATGTGCTTTTGCATTTGGAA
AATGTGATTGGCATTTTTTTCTAATTTTCTAATATGATACGCTGTCGGATGC
TATGGATTACTTAAACCCTCTGGCTACCTAGAAAGATCTTTAAGTGGTTCT
CAACAAGCTTCATACGCAATGTAAATTGTATTATCTCTCAGGATGT
SG13S6

TGTGATTGGCATTTTTTTCTAATTTTCTAATATGATACGCTGTCGGA
TGCTATGGATTACTTAAACCCTCTGGCTACCTAGAAAGATCTTTAAGTGGT
TCTCAACAAGCTTCATACGCAATGTAAATTGTATTATCTCTCAGGATGTGT
GAGAACATCTGTTTTTCTTCTAATGCAGTAAACATATAAGGGTCTCTTG[A/
G]GATATCTTTTAAATAGACTTAATACAACATTCAGGAATGATAACAAAAT
ATAATCACAGTTGTAAGGGAATGTGAGCATTTCATATTAATAACATTGGA
ACCTTATGTTTAATACAGTGTTAAAAGTTGACAAACATGTAGGAGTCAGA
AAATTCAATTAAAATTATCACAGTAATATGAATTTAGCCACATCCTGT
SG13S391

ACTTAAACCCTCTGGCTACCTAGAAAGATCTTTAAGTGGTTCTCAA
CAAGCTTCATACGCAATGTAAATTGTATTATCTCTCAGGATGTGTGAGAAC
ATCTGTTTTTCTTCTAATGCAGTAAACATATAAGGGTCTCTTGGGATATCT
TTTAAATAGACTTAATACAACATTCAGGAATGATAACAAAATATAATCAC[
A/G]GTTGTAAGGGAATGTGAGCATTTCATATTAATAACATTGGAACCTTAT
GTTTAATACAGTGTTAAAAGTTGACAAACATGTAGGAGTCAGAAAATTCA
ATTAAAATTATCACAGTAATATGAATTTAGCCACATCCTGTGTTAGTTATG
AAATCCATTTAACACCACAAACAGTAATATTTTTAGCCAGTTTATTCA
SG13S392

CATTTAACACCACAAACAGTAATATTTTTAGCCAGTTTATTCAAAA
GGAAAACAGGAACTAAACCACTTTCATGCAATATATACTCTGTTAATGTG
GTCAGGCTAATTTTGCTGGGGGAAGGAACTTAACTTTTGAATATTTGAATG
CCCAGTCATTTAATCTGAATATCCTATTTCCTTGCATGTTGCAAAATTTTT[
G/T]TCAATAAAAGGCAGAAAAGAAATCTCTTCTCCATGCTCATCCCTAA
GAGAATGGGTTGTCTGTACCCTGAGAGCATTTTATGGAGGGGACAACCAC
TTTTCTAATTTTCCTTCCCACTTCTCTGTGGGCACAAATGCTCTTTGGTTGA
AAGAGTTGTAATTCAGTCCCAAGATGAGGTGTGGTTACTGCATCCCTA

FIG. 8.10

SG13S371

TCAATCCATGCTCCACACTGCAGCCAGAGTGCTCTACAATGCAAAT
CCATTTGTGAGACTCCTCCTCTTAAAATCCTCAAGTGGCTTCTCTTTGCCCC
CAGGATCATTTTGAAACTCCTTAATGGAAGAGGCATGGCCCTTTGGGATG
TGGTTCCCCAACCCCTCCCACATCATCTTTTCAATCAGATTTCCCACTAA[A
/G]TGGAAATTTTTTCAGGTCCTCAACTTTATGGTGACTTTCTCTTGCTCAGG
ATCTTTGAACATACTGTTTCTTCTTTCCTTTTGTATTTGCCAAGACAACACT
TCCTCTGGTAAGATTTTCCTGACATCCTCTATAAAAAAGATTGAGATAGT
TGACTACCCAAAATGTTTCCCATTCATTCCAAGCTCTATTCAAG
SG13S372

AACACTTCCTCTGGTAAGATTTTCCTGACATCCTCTATAAAAAAAG
ATTGAGATAGTTGACTACCCAAAATGTTTCCCATTCATTCCAAGCTCTATT
CAAGGCAGTAAAGTGCCCGGCTGACAGATTGCATTCCTCATCTTTTCTGAA
GCTAGCAATGGCCATGCAACAGCATTCTGGCCAATAAGATAGAAGTCGAA
[A/G]TTGAAGGGTGGGATTTCCAAGAAAGCTCGTTGAAGACATAATTCCTC
ATTTCACTTCTTACTCTTTCTCTTTCCTGCTTCCTAAAATGCGGTGCAGATG
GCAGACACTTCAAAGCTGTCTCAGGCAATCAGGTGATGTTAAGGCAGAAA
CCAGCTTTATGATGGGTAGAACAGGAAGAAAGAAGGCACCTATGTTCT
SG13S393

CCTACAAATCTCATGTTGACATTTTATCCCTAATATTGGAGGCAGG
GCCTAGTAGGAGGTGTTTGGTCATAGTGATAAATGGCTTGGTGCCGTTCT
CACAGTAACGAGTGAGTTTTTATTCTAGTGGTTCCTGCAAGAACTGATTGT
TAAAAGAGCTTGGATCCTTCCACCCCTCTCTCACTCTTGCTTCCTCTCTC[A/
T]CACCTTGTAATCTCTACAAGCTCTTCACCTCCCCTTCTCCTTTTGCCATA
AGTGGAAGATTTCTGAGGCCTCACCAGAAGCAGATGTTGGTTCCATGCTT
CTTGTACAGCCTGCAGAACCATGAGCCAAATCAACTTCTTTTCTTTATAAT
TATCCAGTCTCAGGTATTCCTTTATAGCAACACAAATGGACTAAGA
SG13S373

GTTGTTTCCAGCTTTGAACTATTTTGAATCCTAAAAGACTGCCAGTT
TTGAATGAGACCCCAGAACAATGAATGTAGGCTCTGTATACAAGTTCAGG
CTGCTGGGCAACTTAGGCCTTAAGACACAACTCTGCCACTTAGGCCTTAA
GACACAACTGACATGATGGTGCTTAAAGTGGCTGTGATGGAAAAGGAGG
CT[A/G]TTTGGAGCCTTTGGAGTGCCTTTATAGGTGAACCCCAGCATAGCA
CCTAATGATTTGGAGCAAAGCTGTGTCATTCCCCAAAGATAACTATTCGCC
TTTTGAGAAACATCTTCTAGCTACTATCAATAATAAACACAGAATGCATC
ACCATGGGCCACCGTGTTGTCTTTTGACCTGAGTTTCCATTGTGAACAAGA
SG13S374

AACTCTGCCACTTAGGCCTTAAGACACAACTGACATGATGGTGCTT
AAAGTGGCTGTGATGGAAAAGGAGGCTGTTTGGAGCCTTTGGAGTGCCTT
TATAGGTGAACCCCAGCATAGCACCTAATGATTTGGAGCAAAGCTGTGTC
ATTCCCCAAAGATAACTATTCGCCTTTTGAGAAACATCTTCTAGCTACTAT
C[A/G]ATAATAAACACAGAATGCATCACCATGGGCCACCGTGTTGTCTTTT
GACCTGAGTTTCCATTGTGAACAAGAGTCATTTGATCCAAGGCAGAAAGT
TGGGTGCACACAGCAGTGTTCCATCATCAAATGGAATATGAGATTGGGCC
CAAGTAGGTCCTGCAGACACAAATAAGTTGCAAGAGCAAGTAGTACAGG
CG
SG13S375

GAAAAGGAGGCTGTTTGGAGCCTTTGGAGTGCCTTTATAGGTGAAC
CCCAGCATAGCACCTAATGATTTGGAGCAAAGCTGTGTCATTCCCCAAAG
ATAACTATTCGCCTTTTGAGAAACATCTTCTAGCTACTATCAATAATAAAC

FIG. 8.11

ACAGAATGCATCACCATGGGCCACCGTGTTGTCTTTTGACCTGAGTTTCCA
[C/T]TGTGAACAAGAGTCATTTGATCCAAGGCAGAAAGTTGGGTGCACAC
AGCAGTGTTCCATCATCAAATGGAATATGAGATTGGGCCCAAGTAGGTCC
TGCAGACACAAATAAGTTGCAAGAGCAAGTAGTACAGGCGCTTGGCCTGG
CCAGTACTGTTGCCAAGTTGACTGCTTCCCCTCAGTCTGCATCTGTGGCTT
SG13S376

CCCCAAAGATAACTATTCGCCTTTTGAGAAACATCTTCTAGCTACT
ATCAATAATAAACACAGAATGCATCACCATGGGCCACCGTGTTGTCTTTT
GACCTGAGTTTCCATTGTGAACAAGAGTCATTTGATCCAAGGCAGAAAGT
TGGGTGCACACAGCAGTGTTCCATCATCAAATGGAATATGAGATTGGGCC
CA[A/G]GTAGGTCCTGCAGACACAAATAAGTTGCAAGAGCAAGTAGTACA
GGCGCTTGGCCTGGCCAGTACTGTTGCCAAGTTGACTGCTTCCCCTCAGTC
TGCATCTGTGGCTTCATGGGGAGTTTCCTATGACCACTTGATGGAGGAAA
AAACAAATTGGAGCATAGTTTATAGTGCTGGTACTACCCAAAGTGGCTAG
CT
SG13S394

GTCCGTGAGTTACAGATCTACACAAAATCACAGAGAGTGGTTAATC
GTTTAGTCTGATGGTCAGGGACTTCCAAGAGACATGATTAGAAAACTGGT
GACAAGGAGTCCTGGGGAAGAGGCATATGGATACCTCTGAACACACACA
AAACATGAGAATATGTATCCCATATGAATGTTAACCAAAGAGCAGCCACA
ACA[C/G]AAGAGGATTTTAAAATCAGCTGAATAAGATGATTCATTCTGACA
GCATCAGCTAGTCTCTTTCCCCAGCCACTGTTGCCCAGTGGGCTTACATAT
ATCATGGCCATGGGGGCAGGGCTATGTATGGACACAGCAACATGAATTTC
CACTCATCAAGGCCAATTTGGCTCCAGCCATTGCTGAGTGCTCAGCCTGCC
A
SG13S25

ACATGATTAGAAAACTGGTGACAAGGAGTCCTGGGGAAGAGGCAT
ATGGATACCTCTGAACACACACAAAACATGAGAATATGTATCCCATATGA
ATGTTAACCAAAGAGCAGCCACAACAGAAGAGGATTTTAAAATCAGCTG
AATAAGATGATTCATTCTGACAGCATCAGCTAGTCTCTTTCCCCAGCCACT
GTT[A/G]CCCAGTGGGCTTACATATATCATGGCCATGGGGGCAGGGCTATG
TATGGACACAGCAACATGAATTTCCACTCATCAAGGCCAATTTGGCTCCA
GCCATTGCTGAGTGCTCAGCCTGCCAAGATAGAAATCTACGCCAATATGG
CACCATTCCCTGGGCTAGAAAACCAACTGGTGGAAGGTTGATTACATTGG
ACC
SG13S395

GGGAATACAATGGTGGTTCCACTAAACTGACAGCTGAGTTTGCCAT
CTCCTCGTGCCAGTGAATACACAAGCAAGGAAGGGGGTTCCTTTCTCACC
TAGGGTGACTGATCCTAATTACCAAGGAGAAATTGGACTGCCACTTCACA
ATGAGGGTGAGGAGTATGTACTCTATGTGTCTGTGATTAATGTCAATAGA
AA[A/G]TGACACCAACCTAGTACACAGAGGACTGATCATGGTCCAGGCCC
TTCAGGAATGAAGATTTGAGTCACCAGGCAAGGAACTTGGACTCACTGAG
GAGGGCATATTCCAAGGAGAATATTTTATCTATGTCCATCTATGTCCATCT
ATATTCCATCTGTGTTCCCCTTGGAATTCCTATTCATGAACATGGGGAATT
C
SG13S396

TATAGAATGAGTAGTGGAAGGTAGTTATAAATGTAAGTCAAAAAC
CACACAACCAATTTGAGAAATGAGGAAGGTAATAGTGTTGAATATGTCTT
CTTTATCTTGATATAAATGTATTTGTGCATATATTAACCAGTTTATTTATTT
ATTATTATTTTTTGAGATGAGCTCTCGCCATGTTGCCCAGGCTGGTCTTGA[

FIG. 8.12

A/C]CTCCTGGGCTCAACTGATTCTACCATTTAGTCCTCCGAGTAGCTGGGA
CTACAGGCATGCACCACCATACCCAGCTGACCAGTTTTTTCCTATTCCTCT
ACTTAATTTCTCTACTATACAACATAATATGTGTTAATGGTAGTTAACTTT
ATATCTCAGTATTAAGTCACAAGATATCAAAAAGGGAATGCGACTTA
SG13S397
ATGTCTTCTTTATCTTGATATAAATGTATTTGTGCATATATTAACCA
GTTTATTTATTTATTATTATTTTTTGAGATGAGCTCTCGCCATGTTGCCCAG
GCTGGTCTTGAACTCCTGGGCTCAACTGATTCTACCATTTAGTCCTCCGAG
TAGCTGGGACTACAGGCATGCACCACCATACCCAGCTGACCAGTTTTT[C/T
]CCTATTCCTCTACTTAATTTCTCTACTATACAACATAATATGTGTTAATGG
TAGTTAACTTTATATCTCAGTATTAAGTCACAAGATATCAAAAAGGGAAT
GCGACTTAGTTACAAGCAGAATGAATATCACTCAAAGATGAATAAAGAG
AAGAGGGTTAGTGCATTTTCTGTTGGATGAGAGAAAGTTTCATTGTT
SG13S377
GCAGTGGCGTGATCCCAGCTCACTGCAATCTCTGCCTCCTGGGTTC
AAGTGATTCTCCTGCCTCAGCCTCCCGAGGGGCTGGGATTGTAGGCGTGC
ACCACTATGCCCATCTAATTTTTGTATTTTTAGTAGAGATAGGGTTTTGCC
ATTTTGGCCAGACTGTCTTGAACTCCTGACCTCAGGTGATCTGCCTGCCTC[
A/G]GCCTCCCACAGTTTTGTGATTATAGGCATGAGCCACCGTGCCCGGCCT
TAACCTTTGTTTTCTTACACAACACACTACGTGATGTTTTCCACATGCATG
GGTCATTTGCTTCATTTACGTACAAATGCATAAGCAATATACTGTGTGGTG
TGAGTTTGTGATGGGAAAAGGAAGAAGTTTTGCGGATACTACACTGG
SG13S189
GCCCAGGCTGTTCTCCAACTCCTGGACTCAAGCCATCCTCTAGCCT
CGGCCTTCCAAAGTGCTGGGACTATAGGCGTGAGCCACGGTGCCAGGCCC
TTGACCACATTTTTAACCCCTCTGAACCTCAGTTTCACTTTCTGGGCAATG
GGAGGGGGGTAATTTGTCCCTCAGAGGGTTGCACTGAGGGGCAAATGTGA
G[C/G]CTCTGGGTACAATGCCCAGTACAGACTAGGTCCCCACGACACAGCC
GCTCAGCGGCTCCGGATTCTGGGCTGCTCTGGACTGCGGCCAGGCGGTCT
TCTGCGGGAATCCGGGCAGGCAGGGCGGGCTGCGCTCCCCTCCCCGGCTC
TCCCGGTGCCCCTTGTCTTTTTGTTCTGTCTCAGCAGCTCTCTATTAAGAT
SG13S100
TTTTTGTTCTGTCTCAGCAGCTCTCTATTAAGATGAATGGCATTTCC
AAAGGCTTCACCTCTGATAAGTGTTCCTCTGCAGCTGCAGCCAGAATCTTA
ATGTGCGCGCTGTAATTTAATGGCCGTCTCGGCTATTAACACGCTCTTCTC
GGGTGAAGTGGACTCCCTCCATCCCCGGGCCTCTGCACGTGCTCTGCGC[A/
G]CTGGCTGGGGGTGACTCCAAGGAGCTCAGAGCGGGGTGCCCGGCACCT
CTCGCCAGGCGCCTTTCGACCTTCTAAAGCGCGAATGGCTGGACTTTTCTC
CCATGTGTGGGGCCCCAGAAGGTGTGGGGCCCCAGAAGGTGTGGGGTCCC
TGCGTTCCACGGAGCCCGGAAGGTTTCCAGTGATGGTGGGGGCTGACC
SG13S398
GGAGCCCGGAAGGTTTCCAGTGATGGTGGGGGCTGACCACGTTGG
TCCCCGTGGGTGCTGTTTTCATGTGCCGGCAGATTGGGATGAGTTTAAAAG
ACAGAAGCGTGTAGGATAGAGAAACTTCTTTAAAAACTGGAAATTTTAAT
CTGGGGATTATAACTATTGGACAGTCAAGTGCAAGAGTGAATACACTTCT
CA[C/G]TCCCTCCTCCCAATTTTTATTTGCGGGATTAGTCAGTCCCCTCTG
CCACATGATAATTGTGAGAACTACCAGGGTCTTCATTCTCCTGCCATCTGG
TTGACCTCTCCAAGAATGGACACCCGGGCAGCCTGGGCCAATGAGGCTGT
CCTAAGAGTTTAGATGAGAGAAGTCAGTCTTTGACAGGTGATGGAAGCTG

FIG. 8.13

SG13S94

CAGTGATGGTGGGGGCTGACCACGTTGGTCCCCGTGGGTGCTGTTT
TCATGTGCCGGCAGATTGGGATGAGTTTAAAAGACAGAAGCGTGTAGGAT
AGAGAAACTTCTTTAAAAACTGGAAATTTTAATCTGGGGATTATAACTATT
GGACAGTCAAGTGCAAGAGTGAATACACTTCTCACTCCCTCCTCCCAATTT
[C/T]TATTTGCGGGATTAGTCAGTCCCCCTCTGCCACATGATAATTGTGAG
AACTACCAGGGTCTTCATTCTCCTGCCATCTGGTTGACCTCTCCAAGAATG
GACACCCGGGCAGCCTGGGCCAATGAGGCTGTCCTAAGAGTTTAGATGAG
AGAAGTCAGTCTTTGACAGGTGATGGAAGCTGTAAAATGTAAAACTCCA

SG13S101

TAAGAGAAGCTGAGAGAGAGCGAGAGGAGAGATTGGAAGAAAGA
CAGAGACAGAGGTAGAGAGAAGGGAAAGAGAGAGAGAAAGGGACAGAA
GAGAGAGAAAAAGAGGGGGCCGGGCGCGGTGGCTCACGCCTGTAATCT
CAGCACTTTGGGAGGCCGAGGCGGGCAGATCACGAGGTCAGGAGATCGA
GACCATCC[C/T]GGCTAACACGGTGAAACCCCGTCTCTACTAAAAATAT
AAAAAAAATTAGCCAGGCGTGGTGGTGGGTGCCTGTAGTCCCAGCTACTG
AGGAGGCTGAGACAGGAGAATGGCGTGAACCCGGGAGGCAGAGCTTGCA
GTGAGCTGAGATCGCGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGAC
TCCGTCTCA

SG13S95

TCCACCAGCAGCTTTTCTGAGTCTCCAGCTTGCAGATGGCAAACCA
TGAAACTTCATGGTGTCCATGAGCATGTGAACCAATTTCTATTATAAATCT
GCAATATATATATGAGGAGACTTATTTATATATTGGTTCAGTTTCTCTG
GAGAGCCTTGGCTAATATAAAGTCTATACTCTACAAAGTGCCCTAGGTAC[
G/T]CAGGGAGTACCCAAGTGTGTCATGACCAGCCCGACAGCCCTGGCTGC
TGGCTTCCCCGCACACAACTCTGCACGCTGCCTTCATCAGCCTTTCTCTCT
CAGCTGAACCGAGGGCATTGAAGCGGGCCTCTGGCACTGTACCTATGAGG
GAGCAATATCTTCCCCTACACTGACCTCTTCCGTGCCGAGATGCAGCCC

SG13S102

GCCTCTGGCACTGTACCTATGAGGGAGCAATATCTTCCCCTACACT
GACCTCTTCCGTGCCGAGATGCAGCCCTCCCTGCTGCCACTAGTTACAGTG
GTCCATGTTCCCTTTCAAAGTGAAGTTTTGATAAAAGCACCTCTTAACCAA
TGCCAAATAGCTAAGTCTGGGACAAAGATTGCAGGTATTTTGCATTTTCC[
A/T]TGTAACCTCAGAGGGATTGCCATTCACACTGATCTGAGCTGCAGAAT
ACCAGGCAGCCACCTCACCCACCCAGCAGGTCCACTCTTATACTTTCTCAG
AAAGCACAGCCACTCTACTCTTATTCAGTTGAAAAGAATTTCCAGGAAGG
TGTTTCTGCGATTGCCTCAGAAAGTCAGTTCCCTTTGGGAATTTCCCT

SG13S103

TACTTTTCTCTGAAGAAATGGAGATATCAGCTGTCCCTCCCCACTG
CCATTTATTCCTTCCTTCATTCAAACCTTATGTGGCTGCTACTTACCGTGTG
TTAAGTGTTCACTTTTTTTCTTGGAATTCAAAAAAAGAAGGACAGTATTTG
GGGCACAGATCTTTTGGTGTTCTATACATTTTTTTAAAGTTTCATTTTA[C/T]
ATTTGTGTGTGCGTGTGTGTGTGTGTGAGACAGTCTTGCTCTGTTGCCC
AGGCTGGAGTGCAGTGGCATAATCATTGGCTCACTGTAGCCTCAAAGTCC
TGGGCCCAAGCAATCTTCCCACCTCAGCCACCCAAAATGCTGGGGTTACA
GGTTTATGCCACTCTGTCTGACCTGAAAGTTTGGGTTTACTTTCC

SG13S104

GCATAATCATTGGCTCACTGTAGCCTCAAAGTCCTGGGCCCAAGCA
ATCTTCCCACCTCAGCCACCCAAAATGCTGGGGTTACAGGTTTATGCCACT
CTGTCTGACCTGAAAGTTTGGGTTTACTTTCCCTTCTTTCTCTTTGCTGAA

FIG. 8.14

GTCAGAGATGATGGCAGCTTCCAGATTCTCTGGTGCCTGTGCTGGGCTC[A/
G]TGCTGGTCATGGTCTTGGGTCCAGGATTCATTCTGGAGACTCTCAGGGA
AGTTTCCCATGACAAGGAAATGTAGGAGAGTGTGCTGGCTTTGCGTGCTC
CTCTGCCAAGCCCTGCTTCTCCTGGTGGGACACACTGAACCACAGCCAGG
GCATTTTGGTGGTTAGTTAAAAAAAAAAAAAAAAAAAAAAAAAAGGAAG
SG13S191

CTTCAGAAATTGTAATGATGAAAGAGTGCAAGCTCTCACTTCCCCT
TCCTGTACAGGGCAGGTTGTGCAGCTGGAGGCAGAGCAGTCCTCTCTGGG
GAGCCTGAAGCAAACATGGATCAAGAAACTGTAGGCAATGTTGTCCTGTT
GGCCATCGTCACCCTCATCAGCGTGGTCCAGAATGGTAAGGAAAGCCCTT
CA[A/C]TCAGGGAAGAACAGAAGGGGAGATTTTCTTTGATGGTTGTTTGGA
AGTCAGGCTTAAACAATTGTGTCTGTGTGTGCGCATGCACAAACACTTTTA
CCTTATCTTTATTTTCTTCTTTTTATTTGAATGTATAGGGTTGTGTGTATTTC
TGTGTAAATTTGGGGTTTTCCTCCTCTTAGTCTTTCACTTTTGTGGTG
SG13S105

TTTTCTAACATCTGCAGTGCAATTGAAGTTACCAGTCATCTGCAGTC
TAAAAAGAAAGTGATTTTGGGAGGTGCGTAGAAAAAATCATCTTATTATT
TTTCCTCTATATTACTTTTTTTCTTTTTTTCTCCTGAAGAAACTTTTTTTTTTG
GTGATACCTTCTTTTTCTCTAGCACGTATAATTTTGGAAGCATTTTTC[A/G]
TATGCAGTGTATACTTCAGAAAGAGAGAGAGAGAGAGGAAAATTGTCCTG
TTCAGCGTTTGCATTTCCATTATTCCTGCTATTAGTTAAAAACAACAACAA
CAACAAAAAACAAGCAGGATACCTAGATCTGGAAAAGGGAGAATTGTGT
AGAGCTGTCTTCCTAAAGTTCTGAGTTAGGGCTGCCTCAGACCACTT
SG13S106

TTTTGGAAGCATTTTTCATATGCAGTGTATACTTCAGAAAGAGAGA
GAGAGAGGAAAATTGTCCTGTTCAGCGTTTGCATTTCCATTATTCCTGC
TATTAGTTAAAAACAACAACAACAACAAAAAACAAGCAGGATACCTAGA
TCTGGAAAAGGGAGAATTGTGTAGAGCTGTCTTCCTAAAGTTCTGAGTTA
GG[A/G]CTGCCTCAGACCACTTTCATAACTATCTCCAGTGGCTTTGTGTTTT
ATATTTATTAAGATAGAGAAAAAAGAGTAATTACTAAGGGCAGCTGCTG
TAGCTTTATGGTGATTACTGAACATTGACATGCTGTCACGTTTTTGGAACT
TTGAGTATTTAATCACTTTGGGATATTCTATTTTCCCCCATCTTGAGTGT
SG13S107

GGAACTTTGAGTATTTAATCACTTTGGGATATTCTATTTTCCCCCAT
CTTGAGTGTGGACAGATGCTGGTGATGTAGCCTTCTGGGCACAGAGCAAG
CCTCCCCCTCAGCCTCTGCACCAGAAAGGCTCAGCTTCACACACTCCAAGT
ATGTTTTCTACAAGAACTACACTTTGTGGCTTTCTGACCCAAACATTTTT[A/
G]TACTAAATTACACACAACAAAGTTGTAGCTCAGAGAGGGAACAAATGG
CTTATTTAGGCCACCATTTTCTTGAGCCATTATGATTTCACACAGGGCTCC
CTTGGCCCTGTAAATTGGCAAGGATTCCATTATTCAACCCGCATACATGTA
CAGAGACCCTGCTCTGGCCCAGATAGTATTCTGGGTACAGGCGGATA
SG13S108

TGTGGACAGATGCTGGTGATGTAGCCTTCTGGGCACAGAGCAAGCC
TCCCCCTCAGCCTCTGCACCAGAAAGGCTCAGCTTCACACACTCCAAGTAT
GTTTTCTACAAGAACTACACTTTGTGGCTTTCTGACCCAAACATTTTTATA
CTAAATTACACACAACAAAGTTGTAGCTCAGAGAGGGAACAAATGGCTTA
[C/T]TTAGGCCACCATTTTCTTGAGCCATTATGATTTCACACAGGGCTCCCT
TGGCCCTGTAAATTGGCAAGGATTCCATTATTCAACCCGCATACATGTACA
GAGACCCTGCTCTGGCCCAGATAGTATTCTGGGTACAGGCGGATAGAGCA
GGAAACAAAACAGCTACAGTGATGGACAGGTCAGCCTGCAGCAATGCC

FIG. 8.15

SG13S109

TTTTTATACTAAATTACACACAACAAAGTTGTAGCTCAGAGAGGGA
ACAAATGGCTTATTTAGGCCACCATTTTCTTGAGCCATTATGATTTCACAC
AGGGCTCCCTTGGCCCTGTAAATTGGCAAGGATTCCATTATTCAACCCGCA
TACATGTACAGAGACCCTGCTCTGGCCCAGATAGTATTCTGGGTACAGGC[
A/G]GATAGAGCAGGAAACAAAACAGCTACAGTGATGGACAGGTCAGCCT
GCAGCAATGCCTGCAGTCTCTGCAAAGGTAGCTGTATGGGTGGGCAGGTG
GCTAGCACTTATTCAGCTCTGGAAGGATCTCCCCTCTGGCCTCTCCCCTGA
CACCCATCAATAAAACTGAGGAGCATCGGTGGACAGGGGACCTTGTGCCC

SG13S110

TTTTCTTGAGCCATTATGATTTCACACAGGGCTCCCTTGGCCCTGTA
AATTGGCAAGGATTCCATTATTCAACCCGCATACATGTACAGAGACCCTG
CTCTGGCCCAGATAGTATTCTGGGTACAGGCGGATAGAGCAGGAAACAAA
ACAGCTACAGTGATGGACAGGTCAGCCTGCAGCAATGCCTGCAGTCTCTG
C[A/G]AAGGTAGCTGTATGGGTGGGCAGGTGGCTAGCACTTATTCAGCTCT
GGAAGGATCTCCCCTCTGGCCTCTCCCCTGACACCCATCAATAAAACTGA
GGAGCATCGGTGGACAGGGGACCTTGTGCCCCCTCCCTGCCTGTGCAGTT
GGGGCTGAACCCAGCTACGAAGTTTGAGCTCACTCTCTCCAGCTCCCTCTC

SG13S111

GACAGGTCAGCCTGCAGCAATGCCTGCAGTCTCTGCAAAGGTAGCT
GTATGGGTGGGCAGGTGGCTAGCACTTATTCAGCTCTGGAAGGATCTCCC
CTCTGGCCTCTCCCCTGACACCCATCAATAAAACTGAGGAGCATCGGTGG
ACAGGGGACCTTGTGCCCCCTCCCTGCCTGTGCAGTTGGGGCTGAACCCA
GC[C/T]ACGAAGTTTGAGCTCACTCTCTCCAGCTCCCTCTCAATTCAGAGCT
GAACTGTGGGAAGCTTCAGAGCTCTCTGTTTCAAGGACAGGTTCTCCTCAC
CTCTCCTAATGGAGGTGCACCAGGGAACTGGCCCTGCTCTGCCCAGGGCT
TTCTCCTGGACTTTGCCATCATGGTCTAGCAAACCCTGTTCAGATTGAGG

SG13S112

CACTCTCTCCAGCTCCCTCTCAATTCAGAGCTGAACTGTGGGAAGC
TTCAGAGCTCTCTGTTTCAAGGACAGGTTCTCCTCACCTCTCCTAATGGAG
GTGCACCAGGGAACTGGCCCTGCTCTGCCCAGGGCTTTCTCCTGGACTTTG
CCATCATGGTCTAGCAAACCCTGTTCAGATTGAGGTGAGTGGTGAGATTT[
C/T]GAATTCTTTTTGACAGATAGGATTAAGTCTTCTTCTGTGGGACAAGTG
GGAGGTAGAGGTAAGATTAAAGATGGCCAAATGTCTGAGTCCTGACAGCC
ACAATATGGAGATCTAGACTTTTACAGACCACAGGGCACAGGGGCCTCA
CTAACAGAGTTCCCGGAAGTGATGAGTGTGCTGGGGGCTTCCTGGTTGA

SG13S113

TAGGATTAAGTCTTCTTCTGTGGGACAAGTGGGAGGTAGAGGTAAG
ATTAAAGATGGCCAAATGTCTGAGTCCTGACAGCCACAATATGGAGATCT
AGACTTTTACAGACCACAGGGCACAGGGGCCTCACTAACAGAGTTCCCG
GAAGTGATGAGTGTGCTGGGGGCTTCCTGGTTGAAGAGACACTAGAATGG
AC[C/G]AGCTGGGAGCTAATTTTTGGGCTGGAGTGTGATGGCCTGCACAT
CACTGCCTCTGTCCCTCCATTGTCACAGCTGCCCCTTAGGAGCCAGCTGAG
GCAATTTGTGGTCAGAGTGACTTTGCACAGTTGTCCTGCCTGTGTTCAGGA
AGGGAGTTTCTGTGGTCCCTTTGAAACCACAGAAGAGCCCCTCGTATAGC

SG13S114

AGTTGTCCTGCCTGTGTTCAGGAAGGGAGTTTCTGTGGTCCCTTTGA
AACCACAGAAGAGCCCCTCGTATAGCTCTCAATGGAGGGGGCAAAACATT
CAAATAACTCAGGAGATAACACAACTATTTGTTTTTAACTGTGAGTTTTTA
GGCAATCACAAAGATCCAGATGTATGTCCAAGCCTCTCTTTGCAATTCTA[

FIG. 8.16

A/T]TTAACCTCAATGTTGCAACCATAGACCTACCTTACAGAGTTCAAAAA
AATATGCAAAAACCCTGCCTTTCTTCTTCCTCATACCCCAAAATGCCATTC
TGAACATTTCCTGTTAGTTAAAAAAAGATTTCCATGGTGTTACCAGGCACT
GTACACAGTCTGTGTCCCAAGACAAGGAGGTACAGTTCCACATGCGCC
SG13S115

AGGGGGCAAAACATTCAAATAACTCAGGAGATAACACAACTATTT
GTTTTTAACTGTGAGTTTTTAGGCAATCACAAAGATCCAGATGTATGTCCA
AGCCTCTCTTTGCAATTCTAATTAACCTCAATGTTGCAACCATAGACCTAC
CTTACAGAGTTCAAAAAAATATGCAAAACCCTGCCTTTCTTCTTCCTCAT
[A/T]CCCCAAAATGCCATTCTGAACATTTCCTGTTAGTTAAAAAAAGATTT
CCATGGTGTTACCAGGCACTGTACACAGTCTGTGTCCCAAGACAAGGAGG
TACAGTTCCACATGCGCCCATGACTGGGTTGGGCTCTGCACTCTCTCTATA
CTTTGAGAGCCTGATTTTCTGTGATTGGGCAGAGCTGGCCCACCTGGTG
SG13S116

TCTGCACTCTCTCTATACTTTGAGAGCCTGATTTTCTGTGATTGGGC
AGAGCTGGCCCACCTGGTGCAATGTCCTCCTCTGCCTTTCAAACATGTTTT
AGTCATCAAGATCTTCAAATTTGTAACCCTTTCCAGCTTGATCCAGCAGAA
TGCAGATTTGGAAAAACAGAACGAGTTTAAAATACATGATTCTAAGAAA[
C/T]CTGGACCAGAACTATCAAAACTTGGTTTCCCAGAGAATATAGCAAAT
GGGCTCATTGGCCAATACTATGACATTGGCTTTTGAGAAAGAAAGGCTT
TATTGCAAGGCTGGCCAGCAAGGAGACAGGAGTTGGGCTCAAATCTGTCT
CCCCAGTTTGGGGCTTAGGGCAAGTTTTAATTACACAGACGCATTTCTTA
SG13S117

AACCCTTTCCAGCTTGATCCAGCAGAATGCAGATTTGGAAAAACAG
AACGAGTTTAAAATACATGATTCTAAGAAACCTGGACCAGAACTATCAAA
ACTTGGTTTCCCAGAGAATATAGCAAATGGGCTCATTGGCCAATACTATG
ACATTGGCTTTTGAGAAAGAAAGGCTTTATTGCAAGGCTGGCCAGCAAG
GA[A/G]ACAGGAGTTGGGCTCAAATCTGTCTCCCCAGTTTGGGGCTTAGGG
CAAGTTTTAATTACACAGACGCATTTCTTATGAGTAGCAGGCAGAGAGCC
TCCAACTTCTTCTGCCTAGGTACCAGCAGCTTAGACATGATGCAAACCTGG
GAAGCACATACTGTATTTGGAGAAAGTGATTGGGAAGAAATGTGAGCTGA
G
SG13S118

TACATGATTCTAAGAAACCTGGACCAGAACTATCAAAACTTGGTTT
CCCAGAGAATATAGCAAATGGGCTCATTGGCCAATACTATGACATTGGCT
TTTGAGAAAGAAAGGCTTTATTGCAAGGCTGGCCAGCAAGGAGACAGG
AGTTGGGCTCAAATCTGTCTCCCCAGTTTGGGGCTTAGGGCAAGTTTTAAT
TA[C/T]ACAGACGCATTTCTTATGAGTAGCAGGCAGAGAGCCTCCAACTTC
TTCTGCCTAGGTACCAGCAGCTTAGACATGATGCAAACCTGGGAAGCACA
TACTGTATTTGGAGAAAGTGATTGGGAAGAAATGTGAGCTGAGGGGAGG
GGCTCAGTGCCCCTGAGCTACACTTAGTGATGGCAGAGGAAGGATGTCCT
CCC
SG13S119

TGGGGCTTAGGGCAAGTTTTAATTACACAGACGCATTTCTTATGAG
TAGCAGGCAGAGAGCCTCCAACTTCTTCTGCCTAGGTACCAGCAGCTTAG
ACATGATGCAAACCTGGGAAGCACATACTGTATTTGGAGAAAGTGATTGG
GAAGAAATGTGAGCTGAGGGGAGGGGCTCAGTGCCCCTGAGCTACACTTA
GT[A/G]ATGGCAGAGGAAGGATGTCCTCCCGCAGGAGGCTGTTCCACATCT
GCTCTGGTTGTAGGGGGAGCTGGCAGGCATTAGCAGCGGCCTCTTTCCCC
CAAGAGAGGCAGCCTCCTCCAAGTTTTGGCGACATTATGGCCCTGCAATC

FIG. 8.17

ATAAGGGTTTGTGAGCATAGTGCTAAGGAGGGAAATGGAGCTGCTGTTAC
TA
SG13S120

     CCTCCTGAGTAGCTAGGACTACAAGCATGTGCCACCACGCCCAGCT
AATTTTTGTATTTTTAGTAAGGACAGGGTTTCACCATGTTGGCCAGGTTGG
CCTCCAACTCCTGACCTCAAGTCATCCTCCTGCCTCGACCTCCCAAAGTGC
TGGGATTACAGGCATGAAACCAGCCTAGAAATACATACTATTATTTATTC[
C/T]TGTTTTACAGATAAGCAAAGTGAGTCATGGAGAATTTGGTTGAAAGT
CCCAAGGTCAGGAGTCGTGAAGCTGGGATTAAAACCTAATCATCTGACTT
TAGAGAGTAGACACTTGCTCCATGCATATTGCCTCCAATTCATTCATTCAA
GCACTCCCTGCTCAAGAAGTTCTTTCTTATGTTGAGCTGAAATCTGCAG .
SG13S121

     TCATCTGACTTTAGAGAGTAGACACTTGCTCCATGCATATTGCCTCC
AATTCATTCATTCAAGCACTCCCTGCTCAAGAAGTTCTTTCTTATGTTGAG
CTGAAATCTGCAGCCCTATGCGTTTTACCCAGCAGTCCTGGTGCTGTTCCC
TAAAATCACTTAGACTGTGCCTGCTCTTTCTGTGTTTACAGTGTCAGCT[A/
G]TAATATCCCCCTCTTCGGCCTAACGTTTCTGAAGTCCCTTGCCACTGGGT
CTCCTCTCCTCTTCCTGTGTTCTTTCTAAGAACACCTATGCAGATAGGTGTC
TTCTGTACAGGGAAGCTGTTCCTGAGATCCGGGCATCGACTCTGTTAGAAT
AATCTACGTATGAGTTATTTTTTTGAGAACTATGTGTCATTGCT
SG13S122

     ATGTTGAGCTGAAATCTGCAGCCCTATGCGTTTTACCCAGCAGTCC
TGGTGCTGTTCCCTAAAATCACTTAGACTGTGCCTGCTCTTTCTGTGTTTAC
AGTGTCAGCTGTAATATCCCCCTCTTCGGCCTAACGTTTCTGAAGTCCCTT
GCCACTGGGTCTCCTCTCCTCTTCCTGTGTTCTTTCTAAGAACACCTAT[A/G
]CAGATAGGTGTCTTCTGTACAGGGAAGCTGTTCCTGAGATCCGGGCATCG
ACTCTGTTAGAATAATCTACGTATGAGTTATTTTTTTGAGAACTATGTGTC
ATTGCTGACTCATATTAACTCTGTGGTTAACTAAAATCTCAAGATCTCTTT
ATGTTTGTTGAGAAACTTATTTAACTTCTCTGGCCCTCCGTTTCC
SG13S123

     GTCCTGGTGCTGTTCCCTAAAATCACTTAGACTGTGCCTGCTCTTTC
TGTGTTTACAGTGTCAGCTGTAATATCCCCCTCTTCGGCCTAACGTTTCTG
AAGTCCCTTGCCACTGGGTCTCCTCTCCTCTTCCTGTGTTCTTTCTAAGAAC
ACCTATGCAGATAGGTGTCTTCTGTACAGGGAAGCTGTTCCTGAGATC[C/T
]GGGCATCGACTCTGTTAGAATAATCTACGTATGAGTTATTTTTTTGAGAA
CTATGTGTCATTGCTGACTCATATTAACTCTGTGGTTAACTAAAATCTCAA
GATCTCTTTATGTTTGTTGAGAAACTTATTTAACTTCTCTGGCCCTCCGTTT
CCTTCACTGAGCAGTGGAGTGATTGATAACCTCCACCTGTGGTT
SG13S43

     CACCTATGCAGATAGGTGTCTTCTGTACAGGGAAGCTGTTCCTGAG
ATCCGGGCATCGACTCTGTTAGAATAATCTACGTATGAGTTATTTTTTTGA
GAACTATGTGTCATTGCTGACTCATATTAACTCTGTGGTTAACTAAAATCT
CAAGATCTCTTTATGTTTGTTGAGAAACTTATTTAACTTCTCTGGCCCTC[A/
C]GTTTCCTTCACTGAGCAGTGGAGTGATTGATAACCTCCACCTGTGGTTG
CTGAAGGTCTTGCACAAGATGATATAGTTAAAGTAGCTAGCAGTGCCCAC
GTACGGCGGATGCCTCACAACGGTTTGCAGCCATCTCTCTATCTGTGTCTT
TGTCTCTCTCTCACACTGGTTTTGGCTTACTGTTAGCAGCTAGCCGA
SG13S399

     TCTGTGGTTAACTAAAATCTCAAGATCTCTTTATGTTTGTTGAGAAA
CTTATTTAACTTCTCTGGCCCTCCGTTTCCTTCACTGAGCAGTGGAGTGATT

<div align="center">FIG. 8.18</div>

GATAACCTCCACCTGTGGTTGCTGAAGGTCTTGCACAAGATGATATAGTT
AAAGTAGCTAGCAGTGCCCACGTACGGCGGATGCCTCACAACGGTTTGC[
A/C]GCCATCTCTCTATCTGTGTCTTTGTCTCTCTCTCACACTGGTTTTGGCT
TACTGTTAGCAGCTAGCCGAGATAAGTGTGTTTATGGTCTTTGCATGTATT
GTTTCTGTAGCATACTGGAGGATTACAAGAGGTTGGGGAGTGAGGGGGCG
GTGAGGAGTAGACAAAGGCAGCCAACTCTTCCAAGTTTAGCTTAGAA
SG13S124

    TTGATAACCTCCACCTGTGGTTGCTGAAGGTCTTGCACAAGATGAT
ATAGTTAAAGTAGCTAGCAGTGCCCACGTACGGCGGATGCCTCACAACGG
TTTGCAGCCATCTCTCTATCTGTGTCTTTGTCTCTCTCTCACACTGGTTTTG
GCTTACTGTTAGCAGCTAGCCGAGATAAGTGTGTTTATGGTCTTTGCATG[
C/T]ATTGTTTCTGTAGCATACTGGAGGATTACAAGAGGTTGGGGAGTGAG
GGGGCGGTGAGGAGTAGACAAAGGCAGCCAACTCTTCCAAGTTTAGCTTA
GAAGGAAGGAGCGGTAAACCCTAGTTGAATGTTGGACTGAAGCAGGTTTG
TTTTTGTTTTGTTTAAAGGATAGGGAAGATCTGTGCGTGTTCCAGGATA
SG13S125

    ACTTGAAGTCAGTGGCATGGACAGGGTCAAGATCACAGTTAGAGG
ATGCAGCCTTAGAGAAAAGGAAGGGGCTCGGTTCTCTGAGCAAGGAGGG
AAAGAAGAGAGGCAGATGCAGAGAAGTACGGCACATCGTGCTGCTGGTT
GTAGAAATAACCTCTGACTTTTAATAAAGTCATCCCTCGGTATCCCTGGGG
GATT[A/G]GTTCTATGACCTCCCTCGGATGCCAAAATTCGTGGATGCTCAA
GTCCCTGATATAAAATGGCATAGTATTTGCATTTAACCTACACACATCCTC
CATATCCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGTGAGATGGAGT
CTTGCTCTGTCGCCCTGGCTGGAGTACAGTGGCTCGATCTTGGCTCACT
SG13S400

    AATACCTGATAGAATGTAAATGCTATGTAAACAGTTGTTATACTGT
ATTGTTAAAAGACAGTAACAAGAAAAAAAATCTGTACATGTTCAGTCCAG
ACAAATGGTTTTCTGTTTTTTTTTTTTTTTTTTTAATATTTTTGGTCAGTGGTT
GGTTGACTCCAGGAATGCAGAACCCGCAGATATAGAAGGTTGATTATGC[
A/G]TTCAGAGGCAGGGAATACCATCTTGGGTTCCAGAAAGAAAATGATCA
GCATTTTCTGTCATACTCTGGTAAAAACAGATCTTTTGAATGGACAGGTGT
ATTAAACCCTGTGGAGCTGGCTGGGCCTGGCGGCTCACGCCTGTAATCCC
AGCACTTTGGGAGGCTGAGGCAGGTGGATCACGAGGTCAGGAGTTCGAG
SG13S126

    TGCCCCGCAGAGTTTGAAGTCCCGGCTGCACCTCTCCCCAGCAGCA
GGTTGACTCTGGAAAGTTGCAGCGTTCTTACCTACAGAGTGGGAACAGTA
CTACCCATTGCACAGAGTGGGTGCAAAGCTCTGTGACGGAATACATGGCA
AGTGCCCACCACATTGCCTGGGATGAGGTGGGCCCTTCCTTTACGTAAGA
GA[A/G]CCCTACAGATACACTCAAAGTGGGCACATTCCTACAGAAGGAGT
GTTATTTGTGTAGAAAGAAAAACATGAAAGGCTTTTATTCCTATACACA
ATAAAGCACCCCTTTAATGTCTTTTTGAGGAGGATAATATGAAATTGATGA
AAAGGAACCCTGTGGTTGGATCCCTGACAATCACATGTATCCCTTTTTTCA
C
SG13S127

    TACAGATACACTCAAAGTGGGCACATTCCTACAGAAGGAGTGTTAT
TTGTGTAGAAAGAAAAACATGAAAGGCTTTTATTCCTATACACAATAAA
GCACCCCTTTAATGTCTTTTTGAGGAGGATAATATGAAATTGATGAAAAG
GAACCCTGTGGTTGGATCCCTGACAATCACATGTATCCCTTTTTTCACTCT
T[A/G]AAAAAGGAGTAAAGGAATAAAATAGAANNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN

FIG. 8.19

NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNATGTTTCAGTCA
CTGTATAATAACTAGCCAGATTTTTGTTGTTGTTGTTTTGTTTTTGTTTTTG
TTTTT
SG13S128

ACATTCTGAACCACAGACAGTTCTTTACCCTGAACCTTTGCATATTT
TGTTCTCTTAGCTTAGAGCGGCCCCTCTCCCTCCGTCTGCTTGGCTAATTTC
TACTTGTTCTTCAGATTTTATCTTAGATGTCATTCCCTCAAGGAATCCTTCT
GTGACTCAACATGGAATTAAGTTGCCTCCTTTGACCCTGAAAGCACC[A/G]
TGTACTCAATCTCATCTTGGCATGACTCACTTTGCTGTGTGGAATGTCTGC
TTTCCTTGTTTGTCTATTCCTTTAGACTGTAAGATCCTAGAAAGTGGGGGC
CGTGCCTTGCTCATGACTGTGTTTCTAACACCAAACACAGTGTTCAGTAGA
GAGCAGCTGCTGAGTACGTTTCTGCTAAATGACAGTTGATGGAG
SG13S129

AATCCTTCTGTGACTCAACATGGAATTAAGTTGCCTCCTTTGACCCT
GAAAGCACCATGTACTCAATCTCATCTTGGCATGACTCACTTTGCTGTGTG
GAATGTCTGCTTTCCTTGTTTGTCTATTCCTTTAGACTGTAAGATCCTAGAA
AGTGGGGGCCGTGCCTTGCTCATGACTGTGTTTCTAACACCAAACACA[A/
G]TGTTCAGTAGAGAGCAGCTGCTGAGTACGTTTCTGCTAAATGACAGTTG
ATGGAGGACATTTAGGGTTGCTTGGAGGTCAAGTCAAGGAGGCATTTAAC
ATTCTAGTAAAACAAGGAAGTAACAGGCTCCTGAACATGCCCACAATGAA
CCAGATGCAAACCTTTTCCCTTGGCAGGATTCTTTGCCCATAAAGTGG
SG13S130

AAAGCACCATGTACTCAATCTCATCTTGGCATGACTCACTTTGCTGT
GTGGAATGTCTGCTTTCCTTGTTTGTCTATTCCTTTAGACTGTAAGATCCTA
GAAAGTGGGGGCCGTGCCTTGCTCATGACTGTGTTTCTAACACCAAACAC
AGTGTTCAGTAGAGAGCAGCTGCTGAGTACGTTTCTGCTAAATGACAGT[G
/T]GATGGAGGACATTTAGGGTTGCTTGGAGGTCAAGTCAAGGAGGCATTT
AACATTCTAGTAAAACAAGGAAGTAACAGGCTCCTGAACATGCCCACAAT
GAACCAGATGCAAACCTTTTCCCTTGGCAGGATTCTTTGCCCATAAAGTGG
AGCACGAAAGCAGGACCCAGAATGGGAGGAGCTTCCAGAGGACCGGAA
SG13S190

TTCTGCTAAATGACAGTTGATGGAGGACATTTAGGGTTGCTTGGAG
GTCAAGTCAAGGAGGCATTTAACATTCTAGTAAAACAAGGAAGTAACAG
GCTCCTGAACATGCCCACAATGAACCAGATGCAAACCTTTTCCCTTGGCA
GGATTCTTTGCCCATAAAGTGGAGCACGAAAGCAGGACCCAGAATGGGA
GGAG[C/T]TTCCAGAGGACCGGAACACTTGCCTTTGAGCGGGTCTACACTG
CCAAGTGAGTCCTAACCCTGATGTTGCTAATAAGTGGGGGCATGGGCAGG
GGGGCCTCCTTCTAGGAGTGATGACCACCCTTAATACCACATGTCTGTCTG
AGCCAAGTTTCTGAGCGCCAGGGAGGTGAGGAAGGTTGGACTTCACCAGA
GAG
SG13S192

GGCATTTAACATTCTAGTAAAACAAGGAAGTAACAGGCTCCTGAA
CATGCCCACAATGAACCAGATGCAAACCTTTTCCCTTGGCAGGATTCTTTG
CCCATAAAGTGGAGCACGAAAGCAGGACCCAGAATGGGAGGAGCTTCCA
GAGGACCGGAACACTTGCCTTTGAGCGGGTCTACACTGCCAAGTGAGTCC
TAA[A/C]CCTGATGTTGCTAATAAGTGGGGGCATGGGCAGGGGGGCCTCCT
TCTAGGAGTGATGACCACCCTTAATACCACATGTCTGTCTGAGCCAAGTTT
CTGAGCGCCAGGGAGGTGAGGAAGGTTGGACTTCACCAGAGAGGCTTTGT
GGACACCCTTTATCATCTTAGTGAGTGCTAGTGTCAAAACAAAGGGAGTG
GG

FIG. 8.20

SG13S193

GCTCCTGAACATGCCCACAATGAACCAGATGCAAACCTTTTCCCTT
GGCAGGATTCTTTGCCCATAAAGTGGAGCACGAAAGCAGGACCCAGAAT
GGGAGGAGCTTCCAGAGGACCGGAACACTTGCCTTTGAGCGGGTCTACAC
TGCCAAGTGAGTCCTAACCCTGATGTTGCTAATAAGTGGGGGCATGGGCA
GGG[A/G]GGCCTCCTTCTAGGAGTGATGACCACCCTTAATACCACATGTCT
GTCTGAGCCAAGTTTCTGAGCGCCAGGGAGGTGAGGAAGGTTGGACTTCA
CCAGAGAGGCTTTGTGGACACCCTTTATCATCTTAGTGAGTGCTAGTGTCA
AAACAAAGGGAGTGGGGATATGGGGCACATTGGTGGAGGGAGGTGTGAT
CTC

SG13S88

TTGCCCATAAAGTGGAGCACGAAAGCAGGACCCAGAATGGGAGGA
GCTTCCAGAGGACCGGAACACTTGCCTTTGAGCGGGTCTACACTGCCAAG
TGAGTCCTAACCCTGATGTTGCTAATAAGTGGGGGCATGGGCAGGGGGGC
CTCCTTCTAGGAGTGATGACCACCCTTAATACCACATGTCTGTCTGAGCCA
AG[C/T]TTCTGAGCGCCAGGGAGGTGAGGAAGGTTGGACTTCACCAGAGA
GGCTTTGTGGACACCCTTTATCATCTTAGTGAGTGCTAGTGTCAAAACAAA
GGGAGTGGGGATATGGGGCACATTGGTGGAGGGAGGTGTGATCTCTGCAG
CTTCAGAAAGATCTGAAAGAGTCATTTGGTTAGAGAAGTTGACCTATTTCC
T

SG13S131

AAACAAAGGGAGTGGGGATATGGGGCACATTGGTGGAGGGAGGTG
TGATCTCTGCAGCTTCAGAAAGATCTGAAAGAGTCATTTGGTTAGAGAAG
TTGACCTATTTCCTGTGGGGTTAGACCAGGGTTGCTACTGTGAACACCAGC
CATGACTCACCAGTCACCTTCAGAAGCCACAGGCAGGACATGCTGACGAC
AG[C/T]CTTCAACTCACCCACCCCTTGCTCCCCTGCGGGTGGAAGTCTGGA
GGTGACACCACTGCATTTTCTAACACGGGGGCTCCTTGAGCAACTAGAAC
AAGAACAGAAAGAATGGGGACATTAGCAGGTGCTTTCCCCCTCTCTCATT
CTTTTCTTTGAATAAAAAGGTTGTTTGAAAACACCTGAGCGGCTCCTAAAG
A

SG13S132

CTCCTCTCTTCTTTATGCAGAGTGTATTTCAAGGCTCAGCCAGTGGC
AGGCATGCTGGGGACTATGGACTACGGACTAGGGGCCTGTCACAGAGGA
AGGCCTCATGCTAGAGAGCTAAGGGAGGAGCTGGCCTTCAGTTCCATCCC
AGGAGCAACTTTGATGTTCCCAGAGATCCTTCCAAAGGGGGAGTCATGGT
CA[A/C]CCAAGAAAAATGTATTCAGAATGCCAAGAATGGTGCAAACTCAG
GACAAAGATTCACACTGCAGGGTTGGAGTCCCTGGGCTTGCTGCTGGCAC
CATGGGAGGGAGGGTCCCCTTCAGGGGTACCGTTGGTTTCCTGTGAATTA
AACTGGCTTCAAGGGATCTCGACTGAACAGGCCTATATCACACTCACTGA
TAT

SG13S133

TCTCCTCATCTAGGTATTTTTAATTGTTTCAGTGAGGTGTAGGCATG
AGGGGATTGGAGGGGGCATCTCCTCCATTGCAGTTTTTCATTGGCTGCTTT
GCTCCCTCAGCTCCGAAATCGCTGGGCCACTCTCGAACGCATTAGTACGG
TAGTCACAGGTTGATTGCCTGGCCCCTTGCCCTCTGTGGGCATTTTCCCT[C
/T]TCAGACAGCCCCTGAGTACTCACAGTGCTGCTACAGTGGGCCACCTAG
ATCTCCCTCTTTCTCCATGCTCCCACGTGCTCTGGGCTCCACTCCCTTCTCC
CAAGCACTTCTGTCCAGGGCTATTCCAGCAGTCTGACCTCAAGGAAATCC
TTTGCTAAACTGATTATAGAGAGGTTTCTATTTTAACATTTAGGTCT

FIG. 8.21

SG13S38
ATCTAGGTATTTTTAATTGTTTCAGTGAGGTGTAGGCATGAGGGGA
TTGGAGGGGGCATCTCCTCCATTGCAGTTTTTCATTGGCTGCTTTGCTCCCT
CAGCTCCGAAATCGCTGGGCCACTCTCGAACGCATTAGTACGGTAGTCAC
AGGTTGATTGCCTGGCCCCTTGCCCTCTGTGGGCATTTTCCCTTTCAGAC[A
/T]GCCCCTGAGTACTCACAGTGCTGCTACAGTGGGCCACCTAGATCTCCCT
CTTTCTCCATGCTCCCACGTGCTCTGGGCTCCACTCCCTTCTCCCAAGCACT
TCTGTCCAGGGCTATTCCAGCAGTCTGACCTCAAGGAAATCCTTTGCTAAA
CTGATTATAGAGAGGTTTCTATTTTAACATTTAGGTCTTCCATGT
SG13S134
AGGTGTAGGCATGAGGGGATTGGAGGGGGCATCTCCTCCATTGCA
GTTTTTCATTGGCTGCTTTGCTCCCTCAGCTCCGAAATCGCTGGGCCACTC
TCGAACGCATTAGTACGGTAGTCACAGGTTGATTGCCTGGCCCCTTGCCCT
CTGTGGGCATTTTCCCTTTCAGACAGCCCCTGAGTACTCACAGTGCTGCTA
[C/T]AGTGGGCCACCTAGATCTCCCTCTTTCTCCATGCTCCCACGTGCTCTG
GGCTCCACTCCCTTCTCCCAAGCACTTCTGTCCAGGGCTATTCCAGCAGTC
TGACCTCAAGGAAATCCTTTGCTAAACTGATTATAGAGAGGTTTCTATTTT
AACATTTAGGTCTTCCATGTATTAATTCTCAGAATCAATTTAAGATG
SG13S135
CCTTTCAGACAGCCCCTGAGTACTCACAGTGCTGCTACAGTGGGCC
ACCTAGATCTCCCTCTTTCTCCATGCTCCCACGTGCTCTGGGCTCCACTCCC
TTCTCCCAAGCACTTCTGTCCAGGGCTATTCCAGCAGTCTGACCTCAAGGA
AATCCTTTGCTAAACTGATTATAGAGAGGTTTCTATTTTAACATTTAGG[C/
T]CTTCCATGTATTAATTCTCAGAATCAATTTAAGATGTTTAAAGGTGTGAT
TTAAGACATTTTAAAACCATTTGGAGGAGAGTACAGAAATTATGTCACTT
GCTGTCAGCCTCTTTGCACCATCTGCAGAGAAAGATACTAGAGTCCCGCC
TTGGACACATCCACATGCAAGAGGTGCAAAGAAGGTGTCTTTGATGA
SG13S136
TTCTCAGAATCAATTTAAGATGTTTAAAGGTGTGATTTAAGACATTT
TAAAACCATTTGGAGGAGAGTACAGAAATTATGTCACTTGCTGTCAGCCT
CTTTGCACCATCTGCAGAGAAAGATACTAGAGTCCCGCCTTGGACACATC
CACATGCAAGAGGTGCAAAGAAGGTGTCTTTGATGAGGCAAGGTCAAAA
CT[C/T]CTCCCCAGACGAAATCCAAAGAAAGCATTCCTACTATGCTATATC
AGTTTGGAAAGAAAAACTTCTGCCAGGTGACTGCATTCTCACTGGTCACA
TTGTGTTCCTATGGACTCCTCAGCTCAACCAATTTGGAGAAGTTATGGTGC
AATTTCACCATATCTGGTTAGAAGTTAAGTTTCCAATTTGCTGGCAATGAA
SG13S137
AAGAAGGTGTCTTTGATGAGGCAAGGTCAAAACTTCTCCCCAGACG
AAATCCAAAGAAAGCATTCCTACTATGCTATATCAGTTTGGAAAGAAAAA
CTTCTGCCAGGTGACTGCATTCTCACTGGTCACATTGTGTTCCTATGGACT
CCTCAGCTCAACCAATTTGGAGAAGTTATGGTGCAATTTCACCATATCTGG
[C/T]TAGAAGTTAAGTTTCCAATTTGCTGGCAATGAAGAAGAAATGGAGCA
GGCCAGGCTGTGTAGTTTCTGCCACGTGCCCCGGGAGTGAACAGCTCTG
TTTGTAAGAAGCCATGGTGCTTAGACCTGGGCTCGCTAGTTGCCAGCCTCC
AAATTGCAGAAGTGCCCTTTGGTTGGTGGCTATGCTGTGTCACTTGGGA
SG13S86
GCAACATATCTGTGTGCCTGTCTGGGTTGTAAAAAGGGTCAAAGAT
CAATGCAGCAGGCAGCTACATGCTGGCAAAAGCCAGAGGCAGCTGGTCT
GTTTGCCTGTGCCAGGAAACCACTGGGAATGGGGTTGTGTGTTATTCTAGG
AGAAAGTCGTCCCAGCAGCAGCTTCTCCAGGGGCATCCAAGAGCACTGAA

FIG. 8.22

AA[A/G]GGTTGCAAGATGACCCATGAGGCTGCAGGAAGAAAAGAACATGC
ATTTAATCTTGCTATCTGAAAAGTAAGACATGAAGCTTTCCTCATTTTTAA
TATACACATGGACAGTAGTATGTGTATATAGTTTATATGCAAATATACTTG
TTATAAGGTTGCATGCTCAAAATTTTTGGTTCATGGGGTGTGGGATCATAA
SG13S87
        CAGCTACATGCTGGCAAAAGCCAGAGGCAGCTGGTCTGTTTGCCTG
TGCCAGGAAACCACTGGGAATGGGGTTGTGTGTTATTCTAGGAGAAAGTC
GTCCCAGCAGCAGCTTCTCCAGGGGCATCCAAGAGCACTGAAAAGGGTTG
CAAGATGACCCATGAGGCTGCAGGAAGAAAAGAACATGCATTTAATCTTG
CT[A/G]TCTGAAAAGTAAGACATGAAGCTTTCCTCATTTTTAATATACACA
TGGACAGTAGTATGTGTATATAGTTTATATGCAAATATACTTGTTATAAGG
TTGCATGCTCAAAATTTTTGGTTCATGGGGTGTGGGATCATAAATGTTTAG
GGACCATGGCTATCAAGGAAAAACAGCATGAAGGATAAATGATACTGGT
G
SG13S138
        CTATCTGAAAAGTAAGACATGAAGCTTTCCTCATTTTTAATATACA
CATGGACAGTAGTATGTGTATATAGTTTATATGCAAATATACTTGTTATAA
GGTTGCATGCTCAAAATTTTTGGTTCATGGGGTGTGGGATCATAAATGTTT
AGGGACCATGGCTATCAAGGAAAAACAGCATGAAGGATAAATGATACTG
G[C/T]GGATTAAAAAGACAGATGCATGTATTTTTAGCATAAAACACAACTG
CTGACTGATACAGATAGCTCAAGATTCTGGGGCAGCTGCTGAACAGATAC
ACTAGCCAGTGTGGCTCATCGGCTCAGACTTGGCCTTAATTAATGGGCTGT
CCCTCCACCCATCTCCCATGAGGGCAGAGCTGAGCCAGGGTTTGAGAGCT
SG13S139
        AGTTTATATGCAAATATACTTGTTATAAGGTTGCATGCTCAAAATTT
TTGGTTCATGGGGTGTGGGATCATAAATGTTTAGGGACCATGGCTATCAA
GGAAAAACAGCATGAAGGATAAATGATACTGGTGGATTAAAAAGACAGA
TGCATGTATTTTTAGCATAAAACACAACTGCTGACTGATACAGATAGCTC
AA[C/G]ATTCTGGGGCAGCTGCTGAACAGATACACTAGCCAGTGTGGCTCA
TCGGCTCAGACTTGGCCTTAATTAATGGGCTGTCCCTCCACCCATCTCCCA
TGAGGGCAGAGCTGAGCCAGGGTTTGAGAGCTAAAAGGAATTGGACCTG
GACTCTGTTCACGTGTATATTTTAATTCTAATTAATTCATTCTTTTGAAAGA
SG13S140
        GTATTTTTAGCATAAAACACAACTGCTGACTGATACAGATAGCTCA
AGATTCTGGGGCAGCTGCTGAACAGATACACTAGCCAGTGTGGCTCATCG
GCTCAGACTTGGCCTTAATTAATGGGCTGTCCCTCCACCCATCTCCCATGA
GGGCAGAGCTGAGCCAGGGTTTGAGAGCTAAAAGGAATTGGACCTGGAC
TC[A/G/T]GTTCACGTGTATATTTTAATTCTAATTAATTCATTCTTTTGAAAG
ACAGAGTCACACTCTGTTGCCTAGGCTGGAGTGCAGTGGCACGATCTTGG
CTCACTGCAACCTCGGCCTCCCAGGTTCAAGTTATTCTCCTGCTTCAGCCT
CCTGAGTAGCTGGGATTATAGGCACATGCCCCCATGCCTGACTAATTTT
SG13S141
        GCTAAAAGGAATTGGACCTGGACTCTGTTCACGTGTATATTTTAAT
TCTAATTAATTCATTCTTTTGAAAGACAGAGTCACACTCTGTTGCCTAGGC
TGGAGTGCAGTGGCACGATCTTGGCTCACTGCAACCTCGGCCTCCCAGGT
TCAAGTTATTCTCCTGCTTCAGCCTCCTGAGTAGCTGGGATTATAGGCACA
[C/T]GCCCCCATGCCTGACTAATTTTTGTATTTTTAGTAGAGACGGGGTTTC
ACCATGTCAGGCTGGTCTTGAACTCCTGACCTCAGGTTATCCACCCGCCTT
GGCCCCTCAAAGTGTTGGAATTACAGGTGTGAGCCACCGTGCCTGGCCTG
TTCACATGTATAAAACACAGTTTAATGTCCTATTCCCAGCCAATGAGC

FIG. 8.23

SG13S39

TCAGGTTATCCACCCGCCTTGGCCCCTCAAAGTGTTGGAATTACAG
GTGTGAGCCACCGTGCCTGGCCTGTTCACATGTATAAAACACAGTTTAAT
GTCCTATTCCCAGCCAATGAGCATGGCTAGAGCAGCCTTGGTCAAAGTTT
GGTTTTTGGAGAAAAATCCTTGTTAGCTGACCTAAGATTCCTCTTTGTGAG
T[G/T]TAAGTAAGCACAGGTTGCAGAGAGGAGAAGGGTCTCTGGAGAGGT
GTAATTTTCTAAATGGATTACAAGTTCATGGACTTTTAACAGGTGTTACAG
GGGATAACAAGTTCTTTATAGACAGACTTTTGAGGACGTTTAAGGGTATTC
TGATTCTTGGTTTTCTAAGAGGGGAATGTATTATTTAACTACAGACACCC

SG13S142

AAAATCCAGAATAATAATAATTTGTCAATAGGAAAGACATTTCCAC
TGGGGGTTAAGAAGGAAGACATTGGAACAATGATAGCCACCACTTATTGA
ATGCTTACTGTGAGCCAGGTGGCACTTCACCTTGTTTCATTCTCACAACAG
TCTAGGGAAGTAATTACTAATGTCTCCATCCACCTCTTGTAGATGAGCAAA
[C/T]TGAGGCTCATTGAGGCTAGGAAATGCACCCACACTCACATAGCCCAT
AAGAGGCAGCCATGGCATTGGGCCCAGACCATGTGAACTTCAAAGACTAC
ACGAGCAGCCACTGGGCAGCTGTCATGGCTAAAGCCACTTGAATTCAGCC
CAGCAGCAACCCCCTCTCCAGGAGGGGCACATAAGCTTGCAGCTTTGGGT

SG13S143

ATAATAATAATTTGTCAATAGGAAAGACATTTCCACTGGGGGTTAA
GAAGGAAGACATTGGAACAATGATAGCCACCACTTATTGAATGCTTACTG
TGAGCCAGGTGGCACTTCACCTTGTTTCATTCTCACAACAGTCTAGGGAAG
TAATTACTAATGTCTCCATCCACCTCTTGTAGATGAGCAAACTGAGGCTCA
[C/T]TGAGGCTAGGAAATGCACCCACACTCACATAGCCCATAAGAGGCAG
CCATGGCATTGGGCCCAGACCATGTGAACTTCAAAGACTACACGAGCAGC
CACTGGGCAGCTGTCATGGCTAAAGCCACTTGAATTCAGCCCAGCAGCAA
CCCCCTCTCCAGGAGGGGCACATAAGCTTGCAGCTTTGGGTAGAAGCTGC
A

SG13S144

GCACTTGAAGTCCTGGATGGCGAGAGGGACTGGCTTGAGCCAGAG
CCAGGAACAAGGCTCTGAGAATATTCTGGAAATCCACAGGAGGAACCCAT
TTTCTTACAGCTGGGAGAATTTCATTCAACTCCAGGCTGACCATGTTTTAT
TAGGAACGAAGGTGACTTGAACTAATAGTCAGGAATGGTTGAATACGGAC
CC[A/G]ATGTCAAATCACTAGGCAGTTCACATTTCTAATGAGCAAATCCCT
TAGACAATTAAGAATTTTTTTCCTTTTGCATAACCCAGACAAAATCGCTAC
TTAAAAACAAACCAAAGACCCGAAACATGAGAAAGAGAAGGAAGCAGG
GGAAATCTTTGGTACTAATAAGTTTTTAAACAATAAGAGCACCAGATATTT
TA

SG13S145

ATGAGCAAATCCCTTAGACAATTAAGAATTTTTTTCCTTTTGCATAA
CCCAGACAAAATCGCTACTTAAAAACAAACCAAAGACCCGAAACATGAG
AAAGAGAAGGAAGCAGGGGAAATCTTTGGTACTAATAAGTTTTTAAACAA
TAAGAGCACCAGATATTTTACCCCATCAGACACAGAATGTTATTCGAATA
AC[C/G]AAAAAAGGAATTTTTTCTCTAAGTTTCTTGAACTGGAAAATGAAT
CATATTTTCTCAGTCCTGAGGCTGCAATTTTGTGCCTCTAGTAACATATAA
GAATAGATGTGATGCCAGTGCCCAGTAGCTGCTGCAATTGTTACTTGGGG
ACCTGTTATTCACTAAGCACTTCACCCCAGTGATAAATTTGTAGGGGCCT

SG13S146

CCGTGTCCATTAGATCAGTGGAAATTCTGGGATTCAGAGCACTTTG
CAAGGTCAGCAGGGGTCTGCTCTTTCTGTCCTGTTCCTGGTTTTTGGTTGTG

FIG. 8.24

CCTGGATTCCAGGGTAGGTTTCTCATCTGTTACCTTCATAGACTTCTCCAG
AAAAGGATCTTTTGACCATCAGAGGACCACGAAGATTCCATTGGTGAGG[
C/T]GCAGATAACCTGATCTCTCTGGGTTCTCTGCAGGGCACAGATGAAGG
GCTGGCCATTCCCAAGTTCTCAGTGGTACCACTGAGGCATGAGACCCTAA
TGGTTTGCATGAGCAGTTTGAAAATTGCATCTTTGTTTTTACCTATATAATC
ACATGAAACCCGTGGTTCTCAAACGTCAGCAGGCATCAGCATCACATG
SG13S26
TCAGTGGTACCACTGAGGCATGAGACCCTAATGGTTTGCATGAGCA
GTTTGAAAATTGCATCTTTGTTTTTACCTATATAATCACATGAAACCCGTG
GTTCTCAAACGTCAGCAGGCATCAGCATCACATGGAGGGCTTGTTAAAAC
AGATTTCTGGGCCCCAACACAGAGTTTTAAATTCTGAAGGCCTGAGGTGG
G[C/T]GTGAACATTTGCATTTCTAACATGTTCTCGATGCTGCTGCCGCCTCT
GGTCCCGAGAGCATGCCTGGAGAACTGCCACCTTCGACCATGGACTGTGA
GAATTCACATGGACCTCAGAATTATAATCAGTCTCTCAGTTTTACAGATAA
GGAAACTAAATCCAGAGAGATTGTTTTGCCAATGGTGAACAGCTGGTTA
SG13S27
ATGGTTTGCATGAGCAGTTTGAAAATTGCATCTTTGTTTTTACCTAT
ATAATCACATGAAACCCGTGGTTCTCAAACGTCAGCAGGCATCAGCATCA
CATGGAGGGCTTGTTAAAACAGATTTCTGGGCCCCAACACAGAGTTTTAA
ATTCTGAAGGCCTGAGGTGGGTGTGAACATTTGCATTTCTAACATGTTCTC
[A/G]ATGCTGCTGCCGCCTCTGGTCCCGAGAGCATGCCTGGAGAACTGCCA
CCTTCGACCATGGACTGTGAGAATTCACATGGACCTCAGAATTATAATCA
GTCTCTCAGTTTTACAGATAAGGAAACTAAATCCAGAGAGATTGTTTTGCC
AATGGTGAACAGCTGGTTAAAGTCAGGATGGAGACTTTAATCCTAGTCA
SG13S147
GAGCAGTTTGAAAATTGCATCTTTGTTTTTACCTATATAATCACATG
AAACCCGTGGTTCTCAAACGTCAGCAGGCATCAGCATCACATGGAGGGCT
TGTTAAAACAGATTTCTGGGCCCCAACACAGAGTTTTAAATTCTGAAGGC
CTGAGGTGGGTGTGAACATTTGCATTTCTAACATGTTCTCGATGCTGCTGC[
C/T]GCCTCTGGTCCCGAGAGCATGCCTGGAGAACTGCCACCTTCGACCAT
GGACTGTGAGAATTCACATGĂCCTCAGAATTATAATCAGTCTCTCAGTTT
TACAGATAAGGAAACTAAATCCAGAGAGATTGTTTTGCCAATGGTGAACA
GCTGGTTAAAGTCAGGATGGAGACTTTAATCCTAGTCAAGTGACCTTTC
SG13S28
AGTTTGAAAATTGCATCTTTGTTTTTACCTATATAATCACATGAAAC
CCGTGGTTCTCAAACGTCAGCAGGCATCAGCATCACATGGAGGGCTTGTT
AAAACAGATTTCTGGGCCCCAACACAGAGTTTTAAATTCTGAAGGCCTGA
GGTGGGTGTGAACATTTGCATTTCTAACATGTTCTCGATGCTGCTGCCGCC
[G/T]CTGGTCCCGAGAGCATGCCTGGAGAACTGCCACCTTCGACCATGGAC
TGTGAGAATTCACATGGACCTCAGAATTATAATCAGTCTCTCAGTTTTACA
GATAAGGAAACTAAATCCAGAGAGATTGTTTTGCCAATGGTGAACAGCTG
GTTAAAGTCAGGATGGAGACTTTAATCCTAGTCAAGTGACCTTTCCTCT
SG13S148
CATCTTTGTTTTTACCTATATAATCACATGAAACCCGTGGTTCTCAA
ACGTCAGCAGGCATCAGCATCACATGGAGGGCTTGTTAAAACAGATTTCT
GGGCCCCAACACAGAGTTTTAAATTCTGAAGGCCTGAGGTGGGTGTGAAC
ATTTGCATTTCTAACATGTTCTCGATGCTGCTGCCGCCTCTGGTCCCGAGA[
G/T]CATGCCTGGAGAACTGCCACCTTCGACCATGGACTGTGAGAATTCAC
ATGGACCTCAGAATTATAATCAGTCTCTCAGTTTTACAGATAAGGAAACT

FIG. 8.25

AAATCCAGAGAGATTGTTTTGCCAATGGTGAACAGCTGGTTAAAGTCAGG
ATGGAGACTTTAATCCTAGTCAAGTGACCTTTCCTCTGTATTTATTTCCC
SG13S98
ATTTCTGACATCCTGAACCATAGTAAAAGGGTGTTTTTTGTTTTTTT
GAGACAGAGTCTTGCTCTGTTGCCTGGGCTGGAGTGCAGTGGTGTGATCTT
GGCTCGCTGCAACCTCCGCCTCCCAGGTTCAAGTGATTCTCCTGCCTCAGC
CTCCTGAGTAGCTGGGATTACAGGTGCTTGCCACCACACCTGGCTATTT[G/
T]TTGTGTTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTT
GAACTCCTGACCTTGTGATCTGCCTGCCTCAGCCTCCCAAATTGCTGGGAT
TACAAGGCGTGTTGTTTTAAGCCACTCAGTTTGTGGCCACTTGTTACAGCA
GCAAGAGGAAACTCATACAGTTATCATGTGAACTCACAGGAATAT
SG13S149
GATCTGCCTGCCTCAGCCTCCCAAATTGCTGGGATTACAAGGCGTG
TTGTTTTAAGCCACTCAGTTTGTGGCCACTTGTTACAGCAGCAAGAGGAA
ACTCATACAGTTATCATGTGAACTCACAGGAATATGGTGAGTTAAAAAGA
GAGGAAGGGTGCAAAACATCCACGGTAGAGTGAGAACTCTCCAGGGAGT
GAG[A/G]ACTGTGCCCAGCATACAGTGATCACCCTCTTAGTAAGCTAAGTT
TCTGAGCACCAGCTTTTTTGAGTTGACTTTGTTGTCTTTAACATTTGAAGAT
CACCCTTCTTTGCTCAGCCTGGCTTGCAGACCTGGGCTGATTTGTGGATCT
GATAGAAAAGTTTCCTTAGTTGGGCTCTTCTCCCCGACCACCCCCATGCC
SG13S29
TGCCTCAGCCTCCCAAATTGCTGGGATTACAAGGCGTGTTGTTTTA
AGCCACTCAGTTTGTGGCCACTTGTTACAGCAGCAAGAGGAAACTCATAC
AGTTATCATGTGAACTCACAGGAATATGGTGAGTTAAAAAGAGAGGAAG
GGTGCAAAACATCCACGGTAGAGTGAGAACTCTCCAGGGAGTGAGGACT
GTGC[A/C]CAGCATACAGTGATCACCCTCTTAGTAAGCTAAGTTTCTGAGC
ACCAGCTTTTTTGAGTTGACTTTGTTGTCTTTAACATTTGAAGATCACCCTT
CTTTGCTCAGCCTGGCTTGCAGACCTGGGCTGATTTGTGGATCTGATAGAA
AAGTTTCCTTAGTTGGGCTCTTCTCCCCGACCACCCCCATGCCAGTGTGGC
SG13S89
GCTACTTTGCAGCCAAGGTAACTCAGACTTCCCTTTGTTCATTCTCC
TTCTATAAAGTGCATCTCAAGGAGGTTCAAAGGGCAGGCTTTTTGTTGAA
AGGACTTTGCCTGACCTCTGGCTCCCATCTGTGAAGCCCTGGAGAGGTGA
GAGCCCTCGGGAGGCCGTGTTTCAGGCATGCTCTGCACCCGTGCAGAGCG
C[A/G]TGTGATAATGCATTGCTAATGCTTGCTCCCTGGTGGCTGGCTGAGA
GCTGCTGTGCTGACAAGGGTGGTTTAAGGCTAAATGTGACTCAGAATCCT
TAAGCAGTGTTAGTTCAGATACAAGGGCATTATAAATGAGAGTGCCTGAG
GGATCTATTTTGGGACCGCTGTCACTTGGCTCTTCTGCTAATAAGCTTCCA
SG13S96
ACAGTTATCAGCAGCCCACAGGCTTGACTTGAGCAAGTTGGAAAG
ACAAATCAACTTCCAGAGTTGATTTAACATTGAGTGGAAATCAGTCATAC
TTTTGGTCCCCTTTCGGGGCCACGCCTGGCACTGTGCCTGGTGGCAGATCG
GCATGAACTGGCCAGCTTCTGTGGCCCTGGAGGGCACAGGCAGAAAGGCC
AC[A/G]CTCAGTCCCATGATGAACTGTTTAAGACTTATTGTTGTCTCCCCGC
TCTGTAAAGTAGATAGAGTGGATTTTATGTCCCTTATTACCTTTCAGGATA
CTTTGACTCAGGGAGATAAAGTAACTTGGGTACAGCTACTCAGCTGGTGA
AGAACACAGGCAGAATGAGTGCCTGGGTCTTTTGACTTAAAATTCTGGAT
SG13S150
CTGTGCCTGGTGGCAGATCGGCATGAACTGGCCAGCTTCTGTGGCC
CTGGAGGGCACAGGCAGAAAGGCCACACTCAGTCCCATGATGAACTGTTT

FIG. 8.26

AAGACTTATTGTTGTCTCCCCGCTCTGTAAAGTAGATAGAGTGGATTTTAT
GTCCCTTATTACCTTTCAGGATACTTTGACTCAGGGAGATAAAGTAACTTG
[C/G]GTACAGCTACTCAGCTGGTGAAGAACACAGGCAGAATGAGTGCCTG
GGTCTTTTGACTTAAAATTCTGGATTTTTCACAAAGATCCTCTTACTTTATT
CATTTACATAATAAATATATATTGAAGAGCTACTCTGTGCCAAGCCCTGTG
CCTAGATATACAGTGATAAATAAAGAGTAGCTTCTAGAGGTCACCTGG
SG13S401
    AAGTTCAGTGATAGAGAGCAGAGGTGAGGCGGCAGCAGAAACCAC
TTAAGGGACACCACGTGGCACTCCTTCTGTGCTGAGAAGGCTGTCAGTAA
GCTCACCATTTATTTCCTATTTTCTCTCCTGAGTTAAATAGGAAACATGTCT
CGCATTACTTGAAAAATCAAGTCAAACTATGCTCTTACTAGGAGTTATGGT
[C/T]CTTTTTATGTCTTAGATGATGCTTGATCTAGATGAATGCGGACTTGCT
GTAGCTAGATAAATACAATGGGAGTTTGAAGGTGTTTCGTAGCCCTGGAA
ATAGGTATTTCCTGTCAAAACAAGCTTTGTCATTGCCAGCAGACAAAAGC
ATCAGTAACCTTGGTTGATAATCGTCATTTCTTAGGAATAAAGTAGACT
SG13S151
    GTATTTCCTGTCAAAACAAGCTTTGTCATTGCCAGCAGACAAAAGC
ATCAGTAACCTTGGTTGATAATCGTCATTTCTTAGGAATAAAGTAGACTGT
AGAATTTTTTTAGCAGAAAGGAAACCCAAAGATAATTCTAGTGCAAATC
CCTCACTTTATAGAGCAGAAGCTCAAGTCCCAGAGGAACAAGTGGCTTGA
A[C/T]GAACATCAGAATTTTAGGGGCTGGATTTGTACCCTCCTGGTGCCAG
CAGCCCACTTCCCTGCAGGAGGCACTCACCTTCCTTGCACAGGGGTATGA
GTGTGGCCATTTTCCACCCATAATCTCTGTTAGCTCATGTTCAATTGGGTT
CCCATTGAAAGAAAAATGGACCAGTAAGTTGGAGCAGAATCATTCAGATG
SG13S30
    AGCTTTGTCATTGCCAGCAGACAAAAGCATCAGTAACCTTGGTTGA
TAATCGTCATTTCTTAGGAATAAAGTAGACTGTAGAATTTTTTTTAGCAGA
AAGGAAACCCAAAGATAATTCTAGTGCAAATCCCTCACTTTATAGAGCAG
AAGCTCAAGTCCCAGAGGAACAAGTGGCTTGAACGAACATCAGAATTTTA
G[G/T]GGCTGGATTTGTACCCTCCTGGTGCCAGCAGCCCACTTCCCTGCAG
GAGGCACTCACCTTCCTTGCACAGGGGTATGAGTGTGGCCATTTTCCACCC
ATAATCTCTGTTAGCTCATGTTCAATTGGGTTCCCATTGAAAGAAAAATGG
ACCAGTAAGTTGGAGCAGAATCATTCAGATGGTATAACATAAGGAAAAA
SG13S31
    TGTTTAAATTGCTTTTATATCTGTAGCTCTAGATAACACTAGTTCCA
GCTTAGTTAACTCCCAGCTCCAAGCCTTCAGGACTTCATAGAGTTATTGGG
GTGCTGCTCTTGGCAGTTTCCCAAAAAGCTAGAATGCAGAGGGAATCTCC
TTCCCAAAAAGCTAGAATGCAGAGGGAATCTCCTTCCCAAAAGGCTAGAA
[C/T]GCAGAGGGAATCTCCTTCCCAAAAAGCTAGAATGCAGAGGGAATCT
CCTTCCCAAAAGGCTAGAACGCAGAGGGAATCTCCTTCCCAAAAGGCTAG
AACGCAGAGGGAATCTCCTTCCCAAAAGGCTAGAATGCAGAGGGAATGT
CCTTCTCTTCTAAATGGTAGCTGTTAGTTCAAGAAAGGTTAAACATTGTGC
T
SG13S152
    GCTGCGTTTGCTGGACTGATGTACTTGTTTGTGAGGCAAAAGTACT
TTGTCGGTTACCTAGGAGAGAACGCAGAGGTAGGTAACTGGGACTACT
AAAGAACTGTGGAGCGATTCCTGATTTTTGAGCAGGAAGAGTGACAATTC
AAAACAGTATTTGACTAGATTCACGGCTCCGTAGCATCCCCTTGGGTGGG
AG[C/G]GGGAAGGCTGACTAGGACCTCTGATTCTTCTTTCCCTGAGCTTTG
AAGGCTCTGAAAATACAGCTGGGGGGACTTGCCCAGTTTTCTTATTAAGC

FIG. 8.27

AATTCCTCCGCATGGTGCTGGCTTTCAAAGGGTGCTTCAGTGCTGTTTGCT
GCACGTGCCTTGCAGCCCCACACCCTGCACTCCCGCCCTGCAGAGTCTGG
C

SG13S402

GAGGCAAAAGTACTTTGTCGGTTACCTAGGAGAGAGAACGCAGAG
GTAGGTAACTGGGACTACTAAAGAACTGTGGAGCGATTCCTGATTTTTGA
GCAGGAAGAGTGACAATTCAAAACAGTATTTGACTAGATTCACGGCTCCG
TAGCATCCCCTTGGGTGGGAGGGGGAAGGCTGACTAGGACCTCTGATTCT
TCT[C/T]TCCCTGAGCTTTGAAGGCTCTGAAAATACAGCTGGGGGGACTTG
CCCAGTTTTCTTATTAAGCAATTCCTCCGCATGGTGCTGGCTTTCAAAGGG
TGCTTCAGTGCTGTTTGCTGCACGTGCCTTGCAGCCCCACACCCTGCACTC
CCGCCCTGCAGAGTCTGGCGCTGGAATGACATTTTAGGTCTGGGTTCCCA
G

SG13S403

TATCTTTCAGGGACCAGAAGAAAGAATGTTGGGAAAATAAGATGC
AGTAAGATGCAGACATGACAGCAGGGTGCAGCGGCTCACGCCTATAATCC
CAGCACTTTGGGAGGCTGAGGTGGGTGGATCACCTGAGGTCAGGAGTTTG
AGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAAATATAC
AAA[A/G]CATTAGCCAGGCATGGTGGTGGGCGCCTGTAATCCCAGCTACTC
CATAGGCTGAGGCTGGAGAATCGCTTGAACCCAGGAGGCAGAGGTTGCA
GTGAGCCGAGATTGCGCCACTGCACTCCAGCCTGGGCAACAAAAGCAAA
ACTCCATCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGATGCAGACACG
AGACTG

SG13S153

TGGGCGCCTGTAATCCCAGCTACTCCATAGGCTGAGGCTGGAGAAT
CGCTTGAACCCAGGAGGCAGAGGTTGCAGTGAGCCGAGATTGCGCCACTG
CACTCCAGCCTGGGCAACAAAAGCAAAACTCCATCTCAAAAAAAAAAAA
AAAAAAAAAAAAAGATGCAGACACGAGACTGTGAAACTGACTAGCAT
CACC[A/T]TTGCATTGTTTATAGATGTTGCCAGACAGAAAGCCCCAAAGCA
GCACAGTACCTTCCTGACATCTGGACTAGGAAATCTAGATTTTAGTAAAA
TACATGCTAATACTTACAGAAGAAATGTCGGCGTTAGAGTATGCCGTCAG
TTCCTTAGAGATTGCAATTCCTAATGCACTAGTATGGTTTCAGGTGCCAGG
AAC

SG13S97

ACTCCATCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGATGCAG
ACACGAGACTGTGAAACTGACTAGCATCACCATTGCATTGTTTATAGATG
TTGCCAGACAGAAAGCCCCAAAGCAGCACAGTACCTTCCTGACATCTGGA
CTAGGAAATCTAGATTTTAGTAAAATACATGCTAATACTTACAGAAGAAA
TGTC[A/G]GCGTTAGAGTATGCCGTCAGTTCCTTAGAGATTGCAATTCCTA
ATGCACTAGTATGGTTTCAGGTGCCAGGAACACGTTCTGTGAGGCTGCTG
CCCCAGGTGCTGACCCCAGCCTTCCACACCATTTTCCTTCCTTGTGTTCAC
AGCCGCTCTGTCTTTACAATAGCACCCTCTCTAGTGGCTAATGGGCTCT
AT

SG13S154

AAAAAAAAAAAAAAAAAAAAAGATGCAGACACGAGACTGTGAA
ACTGACTAGCATCACCATTGCATTGTTTATAGATGTTGCCAGACAGAAAG
CCCCAAAGCAGCACAGTACCTTCCTGACATCTGGACTAGGAAATCTAGAT
TTTAGTAAAATACATGCTAATACTTACAGAAGAAATGTCGGCGTTAGAGT
ATGC[C/T]GTCAGTTCCTTAGAGATTGCAATTCCTAATGCACTAGTATGGTT
TCAGGTGCCAGGAACACGTTCTGTGAGGCTGCTGCCCCAGGTGCTGACCC

FIG. 8.28

CAGCCTTCCACACCATTTTCCTTCCTTGTGTTCACAGCCGCTCTGTCTTTTA
CAATAGCACCCCTCTCTAGTGGCTAATGGGCTCTATGATTAGATAGCATCC
SG13S40

TTTCAGGTGCCAGGAACACGTTCTGTGAGGCTGCTGCCCCAGGTGC
TGACCCCAGCCTTCCACACCATTTTCCTTCCTTGTGTTCACAGCCGCTCTGT
CTTTTACAATAGCACCCCTCTCTAGTGGCTAATGGGCTCTATGATTAGATA
GCATCCTTCAGTAGTGATAAAGGCAGTGACATCCTAGGGAGGTCAGCGG[
G/T]TGAAAGCGCTATATCTGGAAAACCTGAGAGCCTGTGAAGCTCAAGGA
CTTGACGGGGTTAGACCGTGAGCCGGGCTGCAGCTGGAAAAAGAATGACT
GTTCTTTCAGCAGATCCTTCCCTGTGCCATCTCTTTCTTCATTCCTCTCTAG
TGGCATTCTTATTTATCCTCTAAAACCACAATTCCATTATCTCTCCTA
SG13S155

GAGGGTCTTCTCTTTTGCCTGGCTCCCTATGCAGCCCTATCTTACCC
CCTGCAAAGTCCCAGGGATGTGGCTCAGTCACTGCTCCTCTCTTCATCTGT
CACCACTTGCTTGAGATCCTACAGCTGCTTTAATTCCGAGACCATCTGCAG
AACATGACAAAATTTGTCCACCTACCCACATGTCCTTTTAACTTTAAAG[A/
G]CTTTACTAACTGATTCCTATTAGGGAATGAACAGAGGTGGCAAAAATAA
ACAATAGGAGATTGATTTACAAGAAATCTTTAAAATAGTAGATTTCTTCG
GACCTCATTGAAATATAAATGGCCTGCCTTCTTGTGTCCCTCCCTGGTCTC
CCTCTTAGGTGATAAGAAGAAGATCCTGCCAGCCCCATAACCCGCC
SG13S156

TTAAAATAGTAGATTTCTTCGGACCTCATTGAAATATAAATGGCCT
GCCTTCTTGTGTCCCTCCCTGGTCTCCCTCTTTAGGTGATAAGAAGAAGAT
CCTGCCAGCCCCATAACCCGCCATCTGCGCGGGTTCTAGACCCCCTTCTCC
TCCCCTCTGGCCGTGGTAGGCATTACTGATGAATCATGGTGCTCTTTCTT[A
/C]CAGAGACCAAACCTGGCCTCGGAATCCTTCTTAACACAGATACTGCTT
AACACAACCACTCTGAGCAGCTGTCATAAGTAGAAGTAATAGATACTAGA
AGAAATGTCTAAGCCTAATCTAGACCAAAATACGGCCTGATATAGATGCA
AGCCAGAGGGGCTTTATGGTTAAATGCAAGGAGATTTTCAACCCTGCCG
SG13S157

CTGGTCTCCCTCTTTAGGTGATAAGAAGAAGATCCTGCCAGCCCCA
TAACCCGCCATCTGCGCGGGTTCTAGACCCCCTTCTCCTCCCCTCTGGCCG
TGGTAGGCATTACTGATGAATCATGGTGCTCTTTCTTCCAGAGACCAAACC
TGGCCTCGGAATCCTTCTTAACACAGATACTGCTTAACACAACCACTCTG[
A/G]GCAGCTGTCATAAGTAGAAGTAATAGATACTAGAAGAAATGTCTAAG
CCTAATCTAGACCAAAATACGGCCTGATATAGATGCAAGCCAGAGGGGCT
TTATGGTTAAATGCAAGGAGATTTTCAACCCTGCCGTCTAGAAGCTACTTG
CTGAGATCTTCTTCAGTTGGGCCCATCTCCTCCCCAGGCCTCTCTTCTG
SG13S158

CCATAACCCGCCATCTGCGCGGGTTCTAGACCCCCTTCTCCTCCCCT
CTGGCCGTGGTAGGCATTACTGATGAATCATGGTGCTCTTTCTTCCAGAGA
CCAAACCTGGCCTCGGAATCCTTCTTAACACAGATACTGCTTAACACAAC
CACTCTGAGCAGCTGTCATAAGTAGAAGTAATAGATACTAGAAGAAATGT
[A/C]TAAGCCTAATCTAGACCAAAATACGGCCTGATATAGATGCAAGCCA
GAGGGGCTTTATGGTTAAATGCAAGGAGATTTTCAACCCTGCCGTCTAGA
AGCTACTTGCTGAGATCTTCTTCAGTTGGGCCCATCTCCTCCCCAGGCCTC
TCTTCTGTTCCTGGGCTATGTCACACTTGGACTCTGCAGACACCTAATGC
SG13S159

TGGTAGGCATTACTGATGAATCATGGTGCTCTTTCTTCCAGAGACC
AAACCTGGCCTCGGAATCCTTCTTAACACAGATACTGCTTAACACAACCA

FIG. 8.29

CTCTGAGCAGCTGTCATAAGTAGAAGTAATAGATACTAGAAGAAATGTCT
AAGCCTAATCTAGACCAAAATACGGCCTGATATAGATGCAAGCCAGAGG
GGC[G/T]TTATGGTTAAATGCAAGGAGATTTTCAACCCTGCCGTCTAGAAG
CTACTTGCTGAGATCTTCTTCAGTTGGGCCCATCTCCTCCCCAGGCCTCTCT
TCTGTTCCTGGGCTATGTCACACTTGGACTCTGCAGACACCTAATGCTCTT
GGGACCTGCTTTAGTTCTTGACCTCACCAACCGAGGAGGAATTGCTAGAT
SG13S160

CAGAGACCAAACCTGGCCTCGGAATCCTTCTTAACACAGATACTGC
TTAACACAACCACTCTGAGCAGCTGTCATAAGTAGAAGTAATAGATACTA
GAAGAAATGTCTAAGCCTAATCTAGACCAAAATACGGCCTGATATAGATG
CAAGCCAGAGGGGCTTTATGGTTAAATGCAAGGAGATTTTCAACCCTGCC
GT[C/T]TAGAAGCTACTTGCTGAGATCTTCTTCAGTTGGGCCCATCTCCTCC
CCAGGCCTCTCTTCTGTTCCTGGGCTATGTCACACTTGGACTCTGCAGACA
CCTAATGCTCTTGGGACCTGCTTTAGTTCTTGACCTCACCAACCGAGGAGG
AATTGCTAGATGAGATCCTTCCCCCGGAATTTCTCTCTTGAACCCCAGA
SG13S32

GGGCTTTATGGTTAAATGCAAGGAGATTTTCAACCCTGCCGTCTAG
AAGCTACTTGCTGAGATCTTCTTCAGTTGGGCCCATCTCCTCCCCAGGCCT
CTCTTCTGTTCCTGGGCTATGTCACACTTGGACTCTGCAGACACCTAATGC
TCTTGGGACCTGCTTTAGTTCTTGACCTCACCAACCGAGGAGGAATTGCT[
A/C]GATGAGATCCTTCCCCCGGAATTTCTCTCTTGAACCCCAGATGGTCCG
TTGCCCCTTTCCAGAAGTTGCTCCAGCCCTGTCCGCTTAGGAAGTTCAGTG
TCATCCTTGATCCAGTGGGTAGGGAAGACATTCCATAATGAATGCCCCAG
TCTGAGCTTCTTCCTTCAGGCTTCAGGCTGCCCTGCGAGGATTTTGCA
SG13S161

GTAGCTGAGACTACAGGTGTGCACTACCACACCCAGCTAATTTTTT
GTATTTTTAGTAGAGATAGGGTTTAGCTATGTTGGCCAGGCTGGTCTCGAA
CTGCTGAACTCAAGCAATCTGCCATCCCCGGCCTCCCAAAGTACTGGGAG
TATAGGCATAAGCCACCCATGATGCCCAGCCTGAATCTTGGTTTCTTCCCC
[A/G]TTCATTTAAGCTATTACCTGGGCCTGAACTCAATGGCACCTGGCACC
AACTGGCAACTGACTCTTGGTCTTTTATTACCTACCTTCCCTAGCAGGCAC
TGGGTTGCTCCCTCTTCCTATCCCATGGAGTCCTGTCCTCTGTTGGGGCTCC
TACTGATCCTCTTGGCAATATGAAGTTCTCAGCTCAATGGTGGGTGG
SG13S162

CCCGGCCTCCCAAAGTACTGGGAGTATAGGCATAAGCCACCCATG
ATGCCCAGCCTGAATCTTGGTTTCTTCCCCATTCATTTAAGCTATTACCTG
GGCCTGAACTCAATGGCACCTGGCACCAACTGGCAACTGACTCTTGGTCT
TTTATTACCTACCTTCCCTAGCAGGCACTGGGTTGCTCCCTCTTCCTATCCC
[A/G]TGGAGTCCTGTCCTCTGTTGGGGCTCCTACTGATCCTCTTGGCAATAT
GAAGTTCTCAGCTCAATGGTGGGTGGGCAATGACTGCCAACTCTTGAGGC
CAATGAACTCAGGTTACCCCACTCCTCCTCCTCCTGAGTTGCTCACTCACT
CCTCATTCACTCAACATTGATTCAGTAGATATTTGCTACCTGCTCTGT
SG13S163

CCGGCCTCCCAAAGTACTGGGAGTATAGGCATAAGCCACCCATGAT
GCCCAGCCTGAATCTTGGTTTCTTCCCCATTCATTTAAGCTATTACCTGGG
CCTGAACTCAATGGCACCTGGCACCAACTGGCAACTGACTCTTGGTCTTTT
ATTACCTACCTTCCCTAGCAGGCACTGGGTTGCTCCCTCTTCCTATCCCA[C
/T]GGAGTCCTGTCCTCTGTTGGGGCTCCTACTGATCCTCTTGGCAATATGA
AGTTCTCAGCTCAATGGTGGGTGGGCAATGACTGCCAACTCTTGAGGCCA

FIG. 8.30

ATGAACTCAGGTTACCCCACTCCTCCTCCTCCTGAGTTGCTCACTCACTCC
TCATTCACTCAACATTGATTCAGTAGATATTTGCTACCTGCTCTGTG
SG13S164

GGCATAAGCCACCCATGATGCCCAGCCTGAATCTTGGTTTCTTCCC
CATTCATTTAAGCTATTACCTGGGCCTGAACTCAATGGCACCTGGCACCAA
CTGGCAACTGACTCTTGGTCTTTTATTACCTACCTTCCCTAGCAGGCACTG
GGTTGCTCCCTCTTCCTATCCCATGGAGTCCTGTCCTCTGTTGGGGCTCC[C/
T]ACTGATCCTCTTGGCAATATGAAGTTCTCAGCTCAATGGTGGGTGGGCA
ATGACTGCCAACTCTTGAGGCCAATGAACTCAGGTTACCCCACTCCTCCTC
CTCCTGAGTTGCTCACTCACTCCTCATTCACTCAACATTGATTCAGTAGAT
ATTTGCTACCTGCTCTGTGCCAGGTACCAGGTCAGTTGCTGAAGGA
SG13S165

CCTGGCACCAACTGGCAACTGACTCTTGGTCTTTTATTACCTACCTT
CCCTAGCAGGCACTGGGTTGCTCCCTCTTCCTATCCCATGGAGTCCTGTCC
TCTGTTGGGGCTCCTACTGATCCTCTTGGCAATATGAAGTTCTCAGCTCAA
TGGTGGGTGGGCAATGACTGCCAACTCTTGAGGCCAATGAACTCAGGTT[A
/T]CCCCACTCCTCCTCCTCCTGAGTTGCTCACTCACTCCTCATTCACTCAAC
ATTGATTCAGTAGATATTTGCTACCTGCTCTGTGCCAGGTACCAGGTCAGT
TGCTGAAGGAGTAACAGTGAACATGACGGAGTCTTTGTCCCCAAGGAGAC
CCAAGGTGTCTCCTAGAGCCAGGGGCACATTGCAAGACCAAATATA
SG13S166

CTGGCAACTGACTCTTGGTCTTTTATTACCTACCTTCCCTAGCAGGC
ACTGGGTTGCTCCCTCTTCCTATCCCATGGAGTCCTGTCCTCTGTTGGGGC
TCCTACTGATCCTCTTGGCAATATGAAGTTCTCAGCTCAATGGTGGGTGGG
CAATGACTGCCAACTCTTGAGGCCAATGAACTCAGGTTACCCCACTCCT[C/
T]CTCCTCCTGAGTTGCTCACTCACTCCTCATTCACTCAACATTGATTCAGT
AGATATTTGCTACCTGCTCTGTGCCAGGTACCAGGTCAGTTGCTGAAGGA
GTAACAGTGAACATGACGGAGTCTTTGTCCCCAAGGAGACCCAAGGTGTC
TCCTAGAGCCAGGGGCACATTGCAAGACCAAATATATTCAACTTACC
SG13S167

CCATGGAGTCCTGTCCTCTGTTGGGGCTCCTACTGATCCTCTTGGCA
ATATGAAGTTCTCAGCTCAATGGTGGGTGGGCAATGACTGCCAACTCTTG
AGGCCAATGAACTCAGGTTACCCCACTCCTCCTCCTCCTGAGTTGCTCACT
CACTCCTCATTCACTCAACATTGATTCAGTAGATATTTGCTACCTGCTCT[A
/G]TGCCAGGTACCAGGTCAGTTGCTGAAGGAGTAACAGTGAACATGACGG
AGTCTTTGTCCCCAAGGAGACCCAAGGTGTCTCCTAGAGCCAGGGGCACA
TTGCAAGACCAAATATATTCAACTTACCAAAATAATCATAGACCTAGTTCT
CAAAAAGCAAGAAGACTGATTCCTCGTTGTCATTTCTCCTCCTCAGCA
SG13S168

TTAGAGTCTGTGGGCCCCTCCAAGTGTGGAGTATGGTGTTACTTCA
CCAGAGTTTGAGGAGAAACATTCTTCTTTTGGAAGGCCGGGGAGCATAGA
TGGATATCAAGGCTGCTGTTTCTAAAAGCGAAACCCACCAAACAACAGTA
TTAGAATCATCTGTGGTGCTTATTAAAGATACAGATTCCTGGGCCCCATCC
C[A/C]GACTTATGAATCAGAATCTCTGCCAGAGGAAGCCTGAGAATTTGCA
TTCTCAGATGATTCTGCATTCTCAGATAACACATTCTTAGGTGATTCTTAC
ACACACTGGAGTTTGGGAATCGCTGAAGGCTGTTCACTTCTCTTTTCTGAG
AAATGATTCATTCATTTCAGAAATATTTGCAGAGGTCCTTATTTATTG
SG13S33

TGGCCTCATTCGTGTGATAAATCTGAGCCACCACGATATTTGACTTT
TCACAATTTAATTTATCTGAACCCTCTATTCTCTGGCTAAAAAATATCCCT

FIG. 8.31

TACTTGGACTTCTTTATTTTATTTTCAATTCCCTTACCAGCACTAGCAGGGG
ACTCTGTACTCATCTGCTGGCGCTGCCATAACAAAGCACTGCAGCCTG[G/T
]GGGGCTCAAACCACAGAATTTATTCTCTCACAGTCCTAGAGGCTAGAAGT
CCAAGATCAAAGTGTGGGCAGGGTCGGTTTCTCCTGCAGCCTCTCTCCTTG
GCTTATAGAGTGCCACCTTCTACCTGTGTCTTCACATCATCACCTCACTGA
GCATGTCTGTGTCCAAATCTCCCCTTCTTATAAGACCCCAGTCAT
SG13S41

TCTCCTTGGCTTATAGAGTGCCACCTTCTACCTGTGTCTTCACATCA
TCACCTCACTGAGCATGTCTGTGTCCAAATCTCCCCTTCTTATAAGACCCC
AGTCATACTGGATGAGGATCCACCCATATGAGTTCATTTTACCTTAATTAT
CTCTTTAAACACCCTGTCTCCAAATACAGTCCCATTCTGAGGAACTGAG[A/
G]GTAAAGATTCAACATATGAATTTTGGAAGGGACCTAATTCAGCCCACA
ACACCCTCTTTTGGGATGTTTATTTTCCCCCTTAAGGAGCTAGTTAGGATG
TCTTATCTCATGAACATGACTGTGAACAGGAAAACAGGGAGAGAATGAA
GCTGGCCAAGGAACAGGGCTGGTGTCAGCTAGCAGTGCTTTTCTGATGT
SG13S169

CATTTTACCTTAATTATCTCTTTAAACACCCTGTCTCCAAATACAGT
CCCATTCTGAGGAACTGAGAGTAAAGATTCAACATATGAATTTTGGAAGG
GACCTAATTCAGCCCACAACACCCTCTTTTGGGATGTTTATTTTCCCCCTT
AAGGAGCTAGTTAGGATGTCTTATCTCATGAACATGACTGTGAACAGGAA[
A/G]ACAGGGAGAGAATGAAGCTGGCCAAGGAACAGGGCTGGTGTCAGCT
AGCAGTGCTTTTCTGATGTGAGTGGGTCCCACAGGGAGCTTGTTAAAATG
CAGATTCTGATTCATTAGGTTCCAGAGGGACCTGAGATTTCCCATTTCTGA
CAAGTTTCCAGTGTGGGGGCTGATGCTGCTGGTCCACGGACCATACTTTG
SG13S404

GGGAGAGAATGAAGCTGGCCAAGGAACAGGGCTGGTGTCAGCTAG
CAGTGCTTTTCTGATGTGAGTGGGTCCCACAGGGAGCTTGTTAAAATGCA
GATTCTGATTCATTAGGTTCCAGAGGGACCTGAGATTTCCCATTTCTGACA
AGTTTCCAGTGTGGGGGCTGATGCTGCTGGTCCACGGACCATACTTTGAGT
A[G/T]CAAGGAGCTTGATACATAATGGCTGAGTGACTTTCAGACTCCTGCT
GTAGAAAAATTATGAGTTGGCTGGGCGTGGTGGCTCACGCCTGTAATCCC
AGCACTTTGGGAGGCCGAGGTGGGCAGATCACCTGAGGTCAGGAGTTCGA
GACCAGCCTGGCCAACATGGTGAAACACCATCTCTACCAAAAATACAAAA
A
SG13S170

ACTTAAGCCCAGAAGACTGAGGTTGCAGTGAGCCGAGATTGCACC
ACTGCACTCCAGCTTGGGCTACAGAGTGAGACTCTATCTCAAAAACAAAG
AAACAAACAACAACAATAACAACAAAAACCAAGTCTCTCCCTCCACTCAA
AAATGCAAGGGCCTGTCTCCCATTGCTGGGTGCCCAGGTCTCATGAATGT
AGA[C/T]ATGAATTATTCCAGTCAGCCTCAGGAGAATAGAATGAGCCCTCA
GATGCCGAAGCACCTTTCAGATTCCACCGGTTTTATCGGCTCATTTAAACT
TCACTTCTAACACAGTCCTGCATTACACACGTGTCTGTCGTTATGGGCAGC
TGCAGAGAGGGTCTTAATGGTCCTAATGCTCAGTGAGGATGCCCAATGGT
C
SG13S171

CTCAAAAACAAAGAAACAAACAACAACAATAACAACAAAAACCA
AGTCTCTCCCTCCACTCAAAAATGCAAGGGCCTGTCTCCCATTGCTGGGTG
CCCAGGTCTCATGAATGTAGATATGAATTATTCCAGTCAGCCTCAGGAGA
ATAGAATGAGCCCTCAGATGCCGAAGCACCTTTCAGATTCCACCGGTTTT
ATC[A/G]GCTCATTTAAACTTCACTTCTAACACAGTCCTGCATTACACACGT

FIG. 8.32

GTCTGTCGTTATGGGCAGCTGCAGAGAGGGTCTTAATGGTCCTAATGCTC
AGTGAGGATGCCCAATGGTCAACAGAACCTGCCATCTTCAGGCCATCAAG
GAGCTCTGGAGTTAAGGAAATCATGAGAGCACAGAGGGGCGGGTACAGC
AGA
SG13S172

    TGTAGATATGAATTATTCCAGTCAGCCTCAGGAGAATAGAATGAGC
CCTCAGATGCCGAAGCACCTTTCAGATTCCACCGGTTTTATCGGCTCATTT
AAACTTCACTTCTAACACAGTCCTGCATTACACACGTGTCTGTCGTTATGG
GCAGCTGCAGAGAGGGTCTTAATGGTCCTAATGCTCAGTGAGGATGCCCA
[A/G]TGGTCAACAGAACCTGCCATCTTCAGGCCATCAAGGAGCTCTGGAGT
TAAGGAAATCATGAGAGCACAGAGGGGCGGGTACAGCAGAGCCCTCGTG
GTAATGGGTTTTGAGGTCTAGGCTCTCTTCACTTGGGTTTGAAATAAGTTC
AATGACTAGTAATAGCTGAGACACTTCTACCCTTCAAATGAAGTAAATGG
SG13S173

    AGCACCTTTCAGATTCCACCGGTTTTATCGGCTCATTTAAACTTCAC
TTCTAACACAGTCCTGCATTACACACGTGTCTGTCGTTATGGGCAGCTGCA
GAGAGGGTCTTAATGGTCCTAATGCTCAGTGAGGATGCCCAATGGTCAAC
AGAACCTGCCATCTTCAGGCCATCAAGGAGCTCTGGAGTTAAGGAAATCA
[A/T]GAGAGCACAGAGGGGCGGGTACAGCAGAGCCCTCGTGGTAATGGGT
TTTGAGGTCTAGGCTCTCTTCACTTGGGTTTGAAATAAGTTCAATGACTAG
TAATAGCTGAGACACTTCTACCCTTCAAATGAAGTAAATGGGAAAATGGA
GCATTGTTGAGTCCAGGGAGCTATAATTTAAACCCCATATATCTAAAAGG
SG13S42

    CACACGTGTCTGTCGTTATGGGCAGCTGCAGAGAGGGTCTTAATGG
TCCTAATGCTCAGTGAGGATGCCCAATGGTCAACAGAACCTGCCATCTTC
AGGCCATCAAGGAGCTCTGGAGTTAAGGAAATCATGAGAGCACAGAGGG
GCGGGTACAGCAGAGCCCTCGTGGTAATGGGTTTTGAGGTCTAGGCTCTC
TTC[A/G]CTTGGGTTTGAAATAAGTTCAATGACTAGTAATAGCTGAGACAC
TTCTACCCTTCAAATGAAGTAAATGGGAAAATGGAGCATTGTTGAGTCCA
GGGAGCTATAATTTAAACCCCATATATCTAAAAGGGGTAACATTTTTGTGT
GTGTGAAATTGGTGTCATTCGCACTGCATCTACAGTTTTCTTTTTCCTTCTC
SG13S194

    ACATATTTGGGAAACGCATCATACTCTTCCTGTTCCTCATGTCCGTT
GCTGGCATATTCAACTATTACCTCATCTTCTTTTTCGGAAGTGACTTTGAA
AACTACATAAAGACGATCTCCACCACCATCTCCCCTCTACTTCTCATTCCC
TAACTCTCTGCTGAATATGGGGTTGGTGTTCTCATCTAATCAATACCTA[C/
T]AAGTCATCATAATTCAGCTCTTGAGAGCATTCTGCTCTTCTTTAGATGGC
TGTAAATCTATTGGCCATCTGGGCTTCACAGCTTGAGTTAACCTTGCTTTT
CCGGGAACAAAATGATGTCATGTCAGCTCCGCCCCTTGAACATGACCGTG
GCCCCAAATTTGCTATTCCCATGCATTTTGTTTGTTTCTTCACTTA
SG13S195

    TGGTGTTCTCATCTAATCAATACCTACAAGTCATCATAATTCAGCTC
TTGAGAGCATTCTGCTCTTCTTTAGATGGCTGTAAATCTATTGGCCATCTG
GGCTTCACAGCTTGAGTTAACCTTGCTTTTCCGGGAACAAAATGATGTCAT
GTCAGCTCCGCCCCTTGAACATGACCGTGGCCCCAAATTTGCTATTCCC[A/
G]TGCATTTTGTTTGTTTCTTCACTTATCCTGTTCTCTGAAGATGTTTTGTGA
CCAGGTTTGTGTTTTCTTAAAATAAAATGCAGAGACATGTTTTAAGCTGAT
AGTTGAGGGGTTTTGTTAATGGCTTTTGGGGGATTTATCTCTATACCCACA
AACGACTAGTTTGTTTTCCTCAAACTAAATGATAATATTAAAAA

FIG. 8.33

SG13S174

TTATCTCTATACCCACAAACGACTAGTTTGTTTTCCTCAAACTAAAT
GATAATATTAAAAATACACATCCTGGCCAGGTGTGGTGGCTCATACCTGT
AATCCCAGCACTTTGGGAGGCCGAGGCAGGTGGATCACTTGAGGTCAGGA
ATTAAGACCAGCCTGGCCAATATGGTGAAAGCCTGTCTGTACTAAAAATA
C[A/G]AAAATTAGCCAGGTATGCTGGTGGATGCTTATAATCCCAGCTACTT
GGGAGGTTGAGGCAGGAGAATTGCTTGAACCCGGGAGGTAGAGGTTGCA
GTGAGCCAAGATCATGCCACTGCACTCCAGCTTGGGCAACAGAGTGAGAC
TCCATCTCAAATTAAAAAAAATACACATCTGGCTTCTGGAAAAATTACTT
GA

SG13S34

GATCATGCCACTGCACTCCAGCTTGGGCAACAGAGTGAGACTCCAT
CTCAAATTAAAAAAAATACACATCTGGCTTCTGGAAAAATTACTTGAAGA
TCTTTTATGACATCCATCCCTCTTCACACAGCCATGTGAATTAGGTTGGTA
TCTTCATATACTAGCATCGTGCCCAGCACTTCCATGTTATACAGTTTAAAA[
G/T]GTTCTGTAATTCCCTGTGGGAACCTAAGATAATGCGAGGACCGTCAT
ACGTGCCCCCAAATATTGGCAAACCAATGAATAAATGAATGAATGAGTTT
ATGAATCGCTAACTGGCTGTATTTAATGAAGTATGTGTGTTGAGCCATTTC
CCACAGTGTGGACAGATTTGTCCCACAATATGGGCCTCTTCCCAAAGGC

SG13S175

AATTAAAAAAAATACACATCTGGCTTCTGGAAAAATTACTTGAAGA
TCTTTTATGACATCCATCCCTCTTCACACAGCCATGTGAATTAGGTTGGTA
TCTTCATATACTAGCATCGTGCCCAGCACTTCCATGTTATACAGTTTAAAA
TGTTCTGTAATTCCCTGTGGGAACCTAAGATAATGCGAGGACCGTCATAC[
A/G]TGCCCCCAAATATTGGCAAACCAATGAATAAATGAATGAATGAGTTT
ATGAATCGCTAACTGGCTGTATTTAATGAAGTATGTGTGTTGAGCCATTTC
CCACAGTGTGGACAGATTTGTCCCACAATATGGGCCTCTTCCCAAAGGCC
CTACCACCTAATGCCATCACACTGGGGATTTGATTTCAACATGTGAATT

SG13S176

AGTTCATAGTGACAGTGATCCAGCCACTGTCATGACAGGTGCCACT
TGGCAGAAACAGCACAGCTTGGAAGATGGCGGGGTGTAGTCAAGATTCC
AGGATCCCCAACAGAGAAGCCAGCTCTTATAGGGGAGCCATTCATCAGGA
TTGAACTCTCAATCGAGCTGGACAGTAATAGGTGGGTCTGTGTTATTCCCC
AG[A/G]TGAGTATCATGACAGTCACAATCCTAGGAAGGATGTGAAGCCTC
CCCCAGCTCTCCTCCAGTTGCCTGCTTGGGCAGCAGAGATGATGGAATGT
GGAGTCTGGCGTGGTCTGAGGCCTGAATCCATGTGCCTCATGTATGATGCT
CAGGCAAGAGGATCTCTCAATTCAAGGGAGAGGGCCTGAATGAGCCTTGC
TT

SG13S177

CTTGGCAGAAACAGCACAGCTTGGAAGATGGCGGGGTGTAGTCAA
GATTCCAGGATCCCCAACAGAGAAGCCAGCTCTTATAGGGGAGCCATTCA
TCAGGATTGAACTCTCAATCGAGCTGGACAGTAATAGGTGGGTCTGTGTT
ATTCCCCAGATGAGTATCATGACAGTCACAATCCTAGGAAGGATGTGAAG
CCT[C/T]CCCCAGCTCTCCTCCAGTTGCCTGCTTGGGCAGCAGAGATGATG
GAATGTGGAGTCTGGCGTGGTCTGAGGCCTGAATCCATGTGCCTCATGTA
TGATGCTCAGGCAAGAGGATCTCTCAATTCAAGGGAGAGGGCCTGAATGA
GCCTTGCTTTCCAGGCCTGTCTGATGGTCCAGGCTGAAGCCCCTCCTGGCT
TG

SG13S178

CTGGCGTGGTCTGAGGCCTGAATCCATGTGCCTCATGTATGATGCT

FIG. 8.34

CAGGCAAGAGGATCTCTCAATTCAAGGGAGAGGGCCTGAATGAGCCTTGC
TTTCCAGGCCTGTCTGATGGTCCAGGCTGAAGCCCCTCCTGGCTTGCACTG
CCAGACCTCATCCAGCAGGAGCTCCTTGGCATTGACTGCTTCAGGATAGTT
[C/G]CTTCTGCTCTGAGTGCTCTCTAAAGAGCAGTGCTCTACCATCCAAGC
TGGGCTTTTCTTTTCTTCTTGCTGATAGGGAAGGCATGGGACATTGCAGGA
TGGAAGTGGCCCCCAGGCCTTCTCATGCCTGGGCTTGGTTTGGAAGGTGG
TCAGGTGATCAATAATCCTGATTGGCCTGGCATTGAGGAGTTTTCCTGG
SG13S35
        TGCTCTCTAAAGAGCAGTGCTCTACCATCCAAGCTGGGCTTTTCTTT
TCTTCTTGCTGATAGGGAAGGCATGGGACATTGCAGGATGGAAGTGGCCC
CCAGGCCTTCTCATGCCTGGGCTTGGTTTGGAAGGTGGTCAGGTGATCAAT
AATCCTGATTGGCCTGGCATTGAGGAGTTTTCCTGGGATGTGGTCCTTTC[A
/G]GTTTTTAAAAATTATTTTTATTGATACACATATTTGTAGGTATTTGTGG
GGTGCATGTGATACTTTATTATGTGTGTGGATTGTGTAATGATGAAGTCAG
GGCATTTAGGGTCTTCATCACCTTGATTATCATTTCTATGTGTTGAGAACA
TTTCAAGTTCTCAGTTCCAGCTATTTTGAAATAGACAGTCCATTT
SG13S179
        GATACTTTATTATGTGTGTGGATTGTGTAATGATGAAGTCAGGGCA
TTTAGGGTCTTCATCACCTTGATTATCATTTCTATGTGTTGAGAACATTTCA
AGTTCTCAGTTCCAGCTATTTTGAAATAGACAGTCCATTTTGTTAGCTACA
GTCACCCAACCCGGCTGTCAGACATTGGAACTTACTCCTATTGAACTGT[A/
G]TATTTGTACCCATTCACCAAACTCTCTTTGGGCTTTCAGTTTTACAACTG
GGATGATCCTGGGAAAACTAAAGTAAATCAGACACCCGACGTGTGAGCTA
GGTTATAATATGCCCAGTGGACCCTGGGGACATCTTAGCTTTCAGAGGTC
ATGCTGTCCAAGCTGACTGTGGGGCTTCCAGAAGGTGGGGAGAGGAA
SG13S180
        TATGTGTGTGGATTGTGTAATGATGAAGTCAGGGCATTTAGGGTCT
TCATCACCTTGATTATCATTTCTATGTGTTGAGAACATTTCAAGTTCTCAGT
TCCAGCTATTTTGAAATAGACAGTCCATTTTGTTAGCTACAGTCACCCAAC
CCGGCTGTCAGACATTGGAACTTACTCCTATTGAACTGTGTATTTGTAC[C/
T]CATTCACCAAACTCTCTTTGGGCTTTCAGTTTTACAACTGGGATGATCCT
GGGAAAACTAAAGTAAATCAGACACCCGACGTGTGAGCTAGGTTATAATA
TGCCCAGTGGACCCTGGGGACATCTTAGCTTTCAGAGGTCATGCTGTCCA
AGCTGACTGTGGGGCTTCCAGAAGGTGGGGAGAGGAAATGATGCAAT
SG13S181
        TGGGAAAACTAAAGTAAATCAGACACCCGACGTGTGAGCTAGGTT
ATAATATGCCCAGTGGACCCTGGGGACATCTTAGCTTTCAGAGGTCATGC
TGTCCAAGCTGACTGTGGGGCTTCCAGAAGGTGGGGAGAGGAAATGATGC
AATGGCCCATCAGAGGCACTACTTGGGGCCTGGGGCCAGAGTGCATGTCT
AAG[C/G]CATTAAGGGGAGGGGAGAGCAGCCTTCATAATTATGAAGAGGA
GTCTCAGGTGCACAGCTTCTGATGAGGGACAGCTTCTAATTGAAGACAGC
ATTGTGTAATGCTCAAACTCCCTGTCTTCAGAGTGCCTGCTGTATCCCACC
ATCAGTTCTGTGACTTCTCCCTAAGCCTCAATTTTGCATGTGTTACATTGG
GA
SG13S182
        CCTGCATAGCAAATTCTTGCAAATGTAGGGACTCAAAACAATATAA
ATTTATTATCTGACAGTTTTTCTGGGTCAGAGGTCTTACTAGGCTGTAATC
AGAGGGCAACCAAAGCTGTGATCTCAGCTGAAGCTCAGGATTCTCTTCCA
AGCTCACTGGTTGTTGGCAGAATTCAGTTCTTTCCAGTTGGAAGACTAAAG
[C/T]CTACAGTCTTCAGTCTCTAGAAGCCTTTTCTCTGGCACAGGTTTCTCT

FIG. 8.35

ACAACATGGCCATTTATGTCTTTAAGGCCAATAGGAGAACATGATTAGCA
TATTTTTTTTAAGTGAACTTTAGACCCTTTTTAAAGGCCTATCTGATTAGG
CCAGGCCCAAGTGAGCTTTAAGTCAACTGATTAGAGATCTTAATTAC
SG13S183

CTGAAGCTCAGGATTCTCTTCCAAGCTCACTGGTTGTTGGCAGAAT
TCAGTTCTTTCCAGTTGGAAGACTAAAGCCTACAGTCTTCAGTCTCTAGAA
GCCTTTTCTCTGGCACAGGTTTCTCTACAACATGGCCATTTATGTCTTTAA
GGCCAATAGGAGAACATGATTAGCATATTTTTTTTAAGTGAACTTTAGAC[
C/T]CTTTTTTAAAGGCCTATCTGATTAGGCCAGGCCCAAGTGAGCTTTAAG
TCAACTGATTAGAGATCTTAATTACATCTGCAAAGTCCCTTCATGTTTACC
GTATAACATAACTTAGTGAAAGGAGTGAAATTGCAACCAGGTTCTGCCTG
CACTCCACGGAAGGGGATTCTGCAGAAGTGTGGGTCACGGGGGGGTTA
SG13S184

AGAACATGATTAGCATATTTTTTTTAAGTGAACTTTAGACCCTTTTT
TAAAGGCCTATCTGATTAGGCCAGGCCCAAGTGAGCTTTAAGTCAACTGA
TTAGAGATCTTAATTACATCTGCAAAGTCCCTTCATGTTTACCGTATAACA
TAACTTAGTGAAAGGAGTGAAATTGCAACCAGGTTCTGCCTGCACTCCAC[
A/G]GAAGGGGATTCTGCAGAAGTGTGGGTCACGGGGGGGTTATTTTGGGA
TTCTGCCTACGTCACTGAGTCAAAAGAAGCTGAATGGTTGTGATGCTGAG
GTTTTTGGGCAGCAGCAGTGTGTGTGTGTGAGTGAATTCATACGTATGACC
ACCTGGGAAGAAAGGAGGCTGTGGTTTCCTCCACCTCCTGGCAGACAGA
SG13S185

GGGATTACAGACACACACTGCCACGCCTGGCTAATTTTTGTATTTTT
AGTAGAGACGAGGTTTTGCCATGTTGGCCAGGCTGGTCTTGAACTCCTGA
CCTCAAGTGATCCGCCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGAC
GTGAGCCACCATTAACCATTTTTCTATCTCCTGTGGGAAAGGGCACAGTG
A[A/G]AGAACAGATGAAGCTGAGACATACAAGTGAACTCCTCCCTCCTCTC
CATTTAGACTAAAATAGGATTATTCATACTGAGATTCTCCCTGGTTGCAAA
GAGATAATCTGTGCAACTGGGTTTTTACAATTATCCCTACCCTATGCTTTC
CTCATCTGTCTTCCTCGTAGTCAGCTCAGGCTGCTATAACAAAACACCA
SG13S405

GGCAGATTCGGTGTCTAATGAGGTCCTGCTTTCCAGTTTATAGACA
GTGCCTTATCGCTACCGCCTTACACAGTGGAAGGAGAGGACGAGAAGCTC
CTTGGGCTTTTTTTTGTTTCTTTCTTTCTCTCTCTCTCTCTTTTTTTTTTTTT
AATAAGGTCACTATCTTAGTCCATTTGTGTTGCTAAAAGGAACATCT[A/G
]AGGTTGAGTAATTTATTTTATTTTAAAAAGTGGCCAGGCATGGAGGCTTA
TCCTGTAACCCTAATCCTTTAGGAGGCCAAAACAGCAGGATTGTTTGAGG
CCAGGAGTTCAAGACCAGCCTAGGCAAGATAGTGAGACCCCATCTACCCC
ATCTCTACTAAAATTTTAAAAAATTAGCTGTGTGTTGTAAAGTGTGC
SG13S91

AATTTATTTTATTTTAAAAAGTGGCCAGGCATGGAGGCTTATCCTGT
AACCCTAATCCTTTAGGAGGCCAAAACAGCAGGATTGTTTGAGGCCAGGA
GTTCAAGACCAGCCTAGGCAAGATAGTGAGACCCCATCTACCCCATCTCT
ACTAAAATTTTAAAAAATTAGCTGTGTGTTGTAAAGTGTGCTTGTAGTCCC
[A/G]GCCACTTGAGAGGCTGAGGTGGGTGGAGTTCAAGGCTGCAGTGAGT
TATGATTGAGCCACTGCACTCCAACCCGGGTAACGGGGCAAGACCTTGTC
TCTATTTAAAAAAAAAAAATCTTTATGTGGCTCACTATTCTGGGTGGCTGG
AAAGTTCAAGATTGGGCATCTGCATCTGGTGACAGCCTCATGTCGCTTCC
SG13S186

TAACCCTAATCCTTTAGGAGGCCAAAACAGCAGGATTGTTTGAGGC

FIG. 8.36

CAGGAGTTCAAGACCAGCCTAGGCAAGATAGTGAGACCCCATCTACCCCA
TCTCTACTAAAATTTTAAAAAATTAGCTGTGTGTTGTAAAGTGTGCTTGTA
GTCCCGGCCACTTGAGAGGCTGAGGTGGGTGGAGTTCAAGGCTGCAGTGA
G[A/T]TATGATTGAGCCACTGCACTCCAACCCGGGTAACGGGGCAAGACCT
TGTCTCTATTTAAAAAAAAAAAATCTTTATGTGGCTCACTATTCTGGGTGG
CTGGAAAGTTCAAGATTGGGCATCTGCATCTGGTGACAGCCTCATGTCGC
TTCCAGTCATGGGGGAAGACGAAGGAGAGCTGGCACGTGCAGATATCAC
G
SG13S187

ATCCTTTAGGAGGCCAAAACAGCAGGATTGTTTGAGGCCAGGAGTT
CAAGACCAGCCTAGGCAAGATAGTGAGACCCCATCTACCCCATCTCTACT
AAAATTTTAAAAAATTAGCTGTGTGTTGTAAAGTGTGCTTGTAGTCCCGGC
CACTTGAGAGGCTGAGGTGGGTGGAGTTCAAGGCTGCAGTGAGTTATGAT
T[A/G]AGCCACTGCACTCCAACCCGGGTAACGGGGCAAGACCTTGTCTCTA
TTTAAAAAAAAAAAAATCTTTATGTGGCTCACTATTCTGGGTGGCTGGAAA
GTTCAAGATTGGGCATCTGCATCTGGTGACAGCCTCATGTCGCTTCCAGTC
ATGGGGGAAGACGAAGGAGAGCTGGCACGTGCAGATATCACGTGTTGAG
G
SG13S188

TTAAAAAATTAGCTGTGTGTTGTAAAGTGTGCTTGTAGTCCCGGCC
ACTTGAGAGGCTGAGGTGGGTGGAGTTCAAGGCTGCAGTGAGTTATGATT
GAGCCACTGCACTCCAACCCGGGTAACGGGGCAAGACCTTGTCTCTATTT
AAAAAAAAAAAAATCTTTATGTGGCTCACTATTCTGGGTGGCTGGAAAGTT
CA[A/G]GATTGGGCATCTGCATCTGGTGACAGCCTCATGTCGCTTCCAGTC
ATGGGGGAAGACGAAGGAGAGCTGGCACGTGCAGATATCACGTGTTGAG
GGCAGAAGCGAGAGAGAGAGGGGAGAGATGCCAGGCTCTTTTTAACAAC
CAGCACTGGGGAAACTAATAGAGTGAGAGCTCACTGACTCCTGAGGGAG
GACAT
SG13S406

ATGGGGGAAGACGAAGGAGAGCTGGCACGTGCAGATATCACGTGT
TGAGGGCAGAAGCGAGAGAGAGAGGGGAGAGATGCCAGGCTCTTTTTAA
CAACCAGCACTGGGGAAACTAATAGAGTGAGAGCTCACTGACTCCTGAGG
GAGGACATTAATCTATTGATGAGCGACCTGCCTCCATGACCCAAACACCT
CCAA[C/T]GATACCCCACCTCCAACACTGCCACACTAGGGATTAACTTTCA
ACTTGAGATTTAGAGGGGGGAAACTTACAAACTATCGCAGGCACTAATAC
CACTCATGAGGGCTCCACCTTCATGACCTAATCACTTCCTAAAGGCCTTAC
CTCTTAATCTCATCACATTGAGGATTCGATTTCAACTTGAATTTTGGGGGG
AC
SG13S92

CTCGCTGCCACCTGAAATTAGATCATTTATTTACCCCTTTATTTGTT
CAGTTTGCCTTGTCCGTTAGAATATAAGCTTCCAAAGGGCAGGAGCTTTGC
CTATATTGTTAGGCCGGGCATACAATGAGCACTCAAAAAAATATTTGATG
AGTGTATGAAAGAACAGACTGGGTTATGTAATTGTGCCTACTTACCTATA[
C/T]GACCGTGTGGTGGGGTTTATGGTGGGTGTGGTGGTGATGGCTATAGG
GCTATAAGCAAATTTGGGACAGGGAGTCTAAGAAATGTTCTTAAATTTTA
GTAAGCAAAGCATCCTCTACAGAACCTGTCTTAAAACATGAAAGTTCCTT
AGTGCTACCCCCAGAGGTATGATTTGGTAGGTCAAGGATAGGGCCTGGAA
SG13S93

TGCCACCTGAAATTAGATCATTTATTTACCCCTTTATTTGTTCAGTT
TGCCTTGTCCGTTAGAATATAAGCTTCCAAAGGGCAGGAGCTTTGCCTATA

FIG. 8.37

TTGTTAGGCCGGGCATACAATGAGCACTCAAAAAAATATTTGATGAGTGT
ATGAAAGAACAGACTGGGTTATGTAATTGTGCCTACTTACCTATATGACC[
A/G]TGTGGTGGGGTTTATGGTGGGTGTGGTGGTGATGGCTATAGGGCTAT
AAGCAAATTTGGGACAGGGAGTCTAAGAAATGTTCTTAAATTTTAGTAAG
CAAAGCATCCTCTACAGAACCTGTCTTAAAACATGAAAGTTCCTTAGTGCT
ACCCCCAGAGGTATGATTTGGTAGGTCAAGGATAGGGCCTGGAAATTCA
SG13S36
    CCTGTCTTAAAACATGAAAGTTCCTTAGTGCTACCCCCAGAGGTAT
GATTTGGTAGGTCAAGGATAGGGCCTGGAAATTCACATTCTTGTTAAGAT
GTTCTTCATCCGGGGTTTGTTGACCACCTTTTCAGAAGATTTTTGCTCTGTA
GCTGTACTACCCAATGCAGTAGTTCGTAGTCAGTGTGGCTCCTGAGCCCT[
C/T]GAAGTGTAGCTCCTCTGAACTGAGACGTGCTGTAAATGTAAATTGCA
CACCGGAGTTTGAAGAGTTAATACAAAGAAAAAGGAATGCAAAACATCT
CATTAATAATGCTTTACACTGATTACATATTGAAATGGTAATCTTGTAGAT
ATAGTGCGTTAAATAAAATATACTGTTAGGCTTAATTTCACGTCTTTATA
SG13S407
    TCAGCCAATCAACAAGAGGGCAAAAGAACAAACATTTGATGTGTA
ATTACTTAATTTAGTGCATATGCATTTGGGTCCTCAATGTCAGCACTATGG
CAACCAGAACATGGCCACAATAACTGTCTGGAAATGTCTATTCTTACCTG
GACCCAGCAGGCCATGCCCCACTGATTATATAATCTCCCTCTCTCCTTGTT
A[C/T]GGTCTGAATGCTTGCATCCCTCAAAAATTCATGTGTTGAAATCCTA
ACCCCCAAGGTGATGATATTAGGAGGTCGGCCTTTTGAGAGGTAATTAGG
TCATGAAGACAGCATCCTCATGAATGGGATTAGTGTCCTTATAAAATAGG
CCCAAGGGAGCTCATTCACTTTGTCCACCATGTGAGAACACAGCGAGAGG
G
SG13S408
    CCTTGTTACGGTCTGAATGCTTGCATCCCTCAAAAATTCATGTGTTG
AAATCCTAACCCCCAAGGTGATGATATTAGGAGGTCGGCCTTTTGAGAGG
TAATTAGGTCATGAAGACAGCATCCTCATGAATGGGATTAGTGTCCTTATA
AAATAGGCCCAAGGGAGCTCATTCACTTTGTCCACCATGTGAGAACACAG
[C/T]GAGAGGGCACCATTTATGCACCAGGAAATGGGCCTTTTCCAGACAAT
CTGTCGGTGCCTGGATCTTGGACTTCACAGCCTCTAGAACTGTGAGAAATT
AATTTGTTTTTTATAAGCCACCAAATCTATGGTTTTTTTTATAGAAACCGTA
ATGGACTAAAACACTCCCTAATTATATTTAAACTTATCAGTGCACTG
SG13S7
    CTAACCCCCAAGGTGATGATATTAGGAGGTCGGCCTTTTGAGAGGT
AATTAGGTCATGAAGACAGCATCCTCATGAATGGGATTAGTGTCCTTATA
AAATAGGCCCAAGGGAGCTCATTCACTTTGTCCACCATGTGAGAACACAG
CGAGAGGGCACCATTTATGCACCAGGAAATGGGCCTTTTCCAGACAATCT
GT[C/T]GGTGCCTGGATCTTGGACTTCACAGCCTCTAGAACTGTGAGAAAT
TAATTTGTTTTTTATAAGCCACCAAATCTATGGTTTTTTTTATAGAAACCGT
AATGGACTAAAACACTCCCTAATTATATTTAAACTTATCAGTGCACTGGGC
AGTGACATATTAAAAGAATGCTGGCCAACGTAATTGACACCATAAGGCT
SG13S37
    TCATCTCATTTTAACCTTTTGTTTCAAAGCCTCTCTTTTCATGACTTC
CCCGCCTTCATTTTTCCCATATGGTGGGGTTATTATTAAGACATTAAATGA
GAGTGGACAGGTAGGCAAAGGAGGTGGGTTGCAGGGGAGTTGAGGGTTG
CCTGTGTACTTTTCTAGACTGTTCCACTTCACATCAGTGAAATATTCCCA[A
/G]TTGATACTATCATGAAACAAAGCAAATGAAATGCTGAGCACGGAGCTT
CGTCTTGATGAAATGCTGAAAGAAAAGAAAGGAAAAATAAAGTAGCCAT

FIG. 8.38

TATTTTTGCCCTTCCTCCCACCCCCATGTTTACTACTCTTATTTCTCTTTTGT
ATTGTTGTGTTGGAAGCACAGCATCAGAAAAACTCCCAGTTTTGAGA
SG13S409
ACAGGTAGGCAAAGGAGGTGGGTTGCAGGGGAGTTGAGGGTTGCC
TGTGTACTTTTCTAGACTGTTCCACTTCACATCAGTGAAATATTCCCAATT
GATACTATCATGAAACAAAGCAAATGAAATGCTGAGCACGGAGCTTCGTC
TTGATGAAATGCTGAAAGAAAGAAAGGAAAAATAAAGTAGCCATTATTT
TT[A/G]CCCTTCCTCCCACCCCCATGTTTACTACTCTTATTTCTCTTTTGTAT
TGTTGTGTTGGAAGCACAGCATCAGAAAAACTCCCAGTTTTGAGAGATAA
CTCAGTGTTTAGTTCACTTAAACCTGAGAAAGGAGAAGAGGATGCCACCG
TGAGGTCCAGGACGTAAAGAGGAAAAAAACAGACAAAAAAATCCATATG
A
SG13S8
CAGGTAGGCAAAGGAGGTGGGTTGCAGGGGAGTTGAGGGTTGCCT
GTGTACTTTTCTAGACTGTTCCACTTCACATCAGTGAAATATTCCCAATTG
ATACTATCATGAAACAAAGCAAATGAAATGCTGAGCACGGAGCTTCGTCT
TGATGAAATGCTGAAAGAAAGAAAGGAAAAATAAAGTAGCCATTATTTT
TG[A/C]CCTTCCTCCCACCCCCATGTTTACTACTCTTATTTCTCTTTTGTATT
GTTGTGTTGGAAGCACAGCATCAGAAAAACTCCCAGTTTTGAGAGATAAC
TCAGTGTTTAGTTCACTTAAACCTGAGAAAGGAGAAGAGGATGCCACCGT
GAGGTCCAGGACGTAAAGAGGAAAAAAACAGACAAAAAAATCCATATGA
A
SG13S410
TTCGTCTTGATGAAATGCTGAAAGAAAGAAAGGAAAAATAAAGT
AGCCATTATTTTGCCCTTCCTCCCACCCCCATGTTTACTACTCTTATTTCT
CTTTTGTATTGTTGTGTTGGAAGCACAGCATCAGAAAAACTCCCAGTTTTG
AGAGATAACTCAGTGTTTAGTTCACTTAAACCTGAGAAAGGAGAAGAGGA
[C/T]GCCACCGTGAGGTCCAGGACGTAAAGAGGAAAAAAACAGACAAAA
AAATCCATATGAAATGAAAATGTGAAAGAGGCGCTTTCGAGCAGATGAGT
GTTGTAGATTACAGTGTTGAGAGCTGTTTGTGTCCAGAGCTGCTTGCTGCA
CCTGGCGGGATAAACACTGGTCTAACAGAGGATCCTTGTTTCAAGGAGGC
T
SG13S411
AAGAAAGAAAGGAAAAATAAAGTAGCCATTATTTTTGCCCTTCCT
CCCACCCCCATGTTTACTACTCTTATTTCTCTTTTGTATTGTTGTGTTGGAA
GCACAGCATCAGAAAAACTCCCAGTTTTGAGAGATAACTCAGTGTTTAGT
TCACTTAAACCTGAGAAAGGAGAAGAGGATGCCACCGTGAGGTCCAGGA
C[A/G]TAAAGAGGAAAAAAACAGACAAAAAAATCCATATGAAATGAAAA
TGTGAAAGAGGCGCTTTCGAGCAGATGAGTGTTGTAGATTACAGTGTTGA
GAGCTGTTTGTGTCCAGAGCTGCTTGCTGCACCTGGCGGGATAAACACTG
GTCTAACAGAGGATCCTTGTTTCAAGGAGGCTGCCTTTTATTTGGGGGGAC
AA
SG13S9
ATTATTTTTGCCCTTCCTCCCACCCCCATGTTTACTACTCTTATTTCT
CTTTTGTATTGTTGTGTTGGAAGCACAGCATCAGAAAAACTCCCAGTTTTG
AGAGATAACTCAGTGTTTAGTTCACTTAAACCTGAGAAAGGAGAAGAGGA
TGCCACCGTGAGGTCCAGGACGTAAAGAGGAAAAAAACAGACAAAAAAA
[C/T]CCATATGAAATGAAAATGTGAAAGAGGCGCTTTCGAGCAGATGAGT
GTTGTAGATTACAGTGTTGAGAGCTGTTTGTGTCCAGAGCTGCTTGCTGCA

FIG. 8.39

CCTGGCGGGATAAACACTGGTCTAACAGAGGATCCTTGTTTCAAGGAGGC
TGCCTTTTATTTGGGGGGACAAAATTGTTCTTGAAAGCTGCTCAGTGGTT
SG13S412

TTTGTATTGTTGTGTTGGAAGCACAGCATCAGAAAAACTCCCAGTT
TTGAGAGATAACTCAGTGTTTAGTTCACTTAAACCTGAGAAAGGAGAAGA
GGATGCCACCGTGAGGTCCAGGACGTAAAGAGGAAAAAAACAGACAAAA
AAATCCATATGAAATGAAAATGTGAAAGAGGCGCTTTCGAGCAGATGAGT
GTT[A/G]TAGATTACAGTGTTGAGAGCTGTTTGTGTCCAGAGCTGCTTGCT
GCACCTGGCGGGATAAACACTGGTCTAACAGAGGATCCTTGTTTCAAGGA
GGCTGCCTTTTATTTGGGGGGACAAAATTGTTCTTGAAAGCTGCTCAGTGG
TTCAAGCTACAGCATGGTGGACTAGCAGAATGGACTCCAGGGCCTCCGAG
GA
SG13S413

TTTTGAGAGATAACTCAGTGTTTAGTTCACTTAAACCTGAGAAAGG
AGAAGAGGATGCCACCGTGAGGTCCAGGACGTAAAGAGGAAAAAAACAG
ACAAAAAAATCCATATGAAATGAAAATGTGAAAGAGGCGCTTTCGAGCA
GATGAGTGTTGTAGATTACAGTGTTGAGAGCTGTTTGTGTCCAGAGCTGCT
TGC[C/T]GCACCTGGCGGGATAAACACTGGTCTAACAGAGGATCCTTGTTT
CAAGGAGGCTGCCTTTTATTTGGGGGGACAAAATTGTTCTTGAAAGCTGCT
CAGTGGTTCAAGCTACAGCATGGTGGACTAGCAGAATGGACTCCAGGGCC
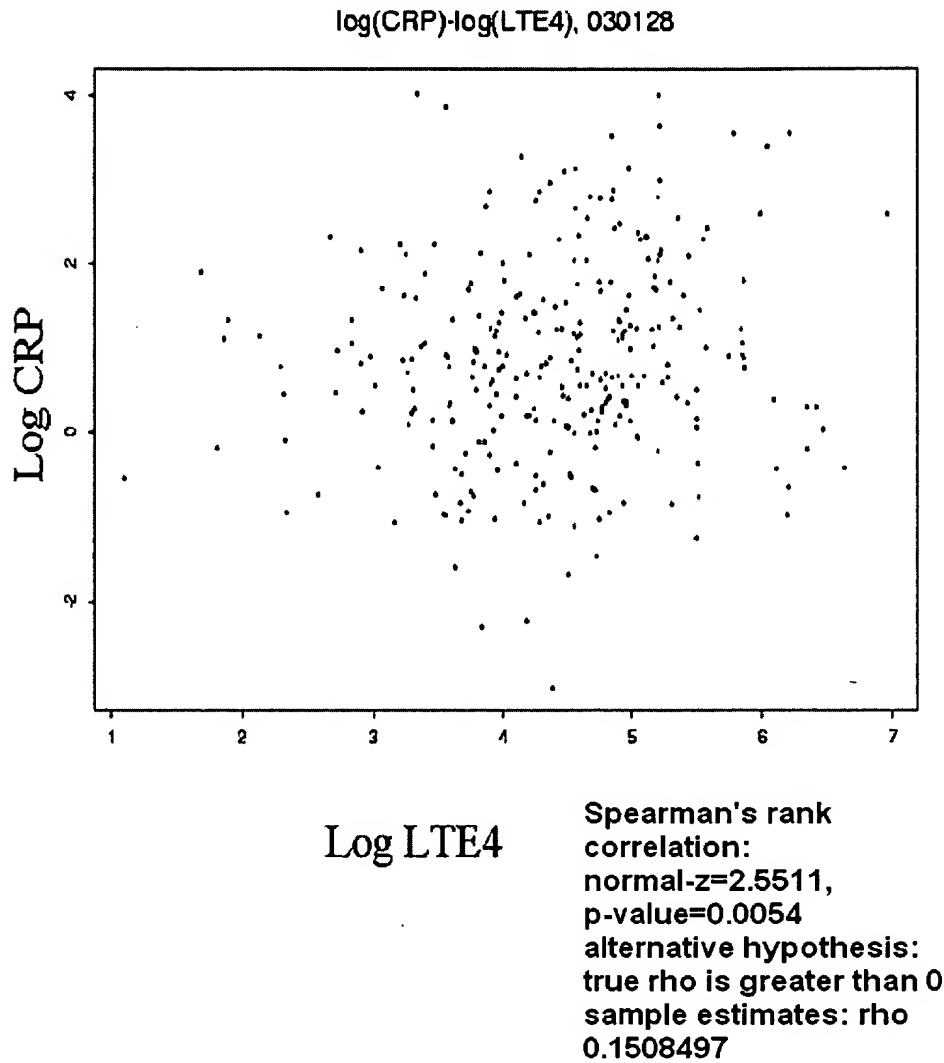TCCGAGGAGACAGTGACTGCTGCCAGAAATAGTCAAGGATAGAAAGGAA
GGA

FIG. 8.40

log(CRP)-log(LTE4), 030128

Log LTE4

Spearman's rank correlation: normal-z=2.5511, p-value=0.0054 alternative hypothesis: true rho is greater than 0 sample estimates: rho 0.1508497
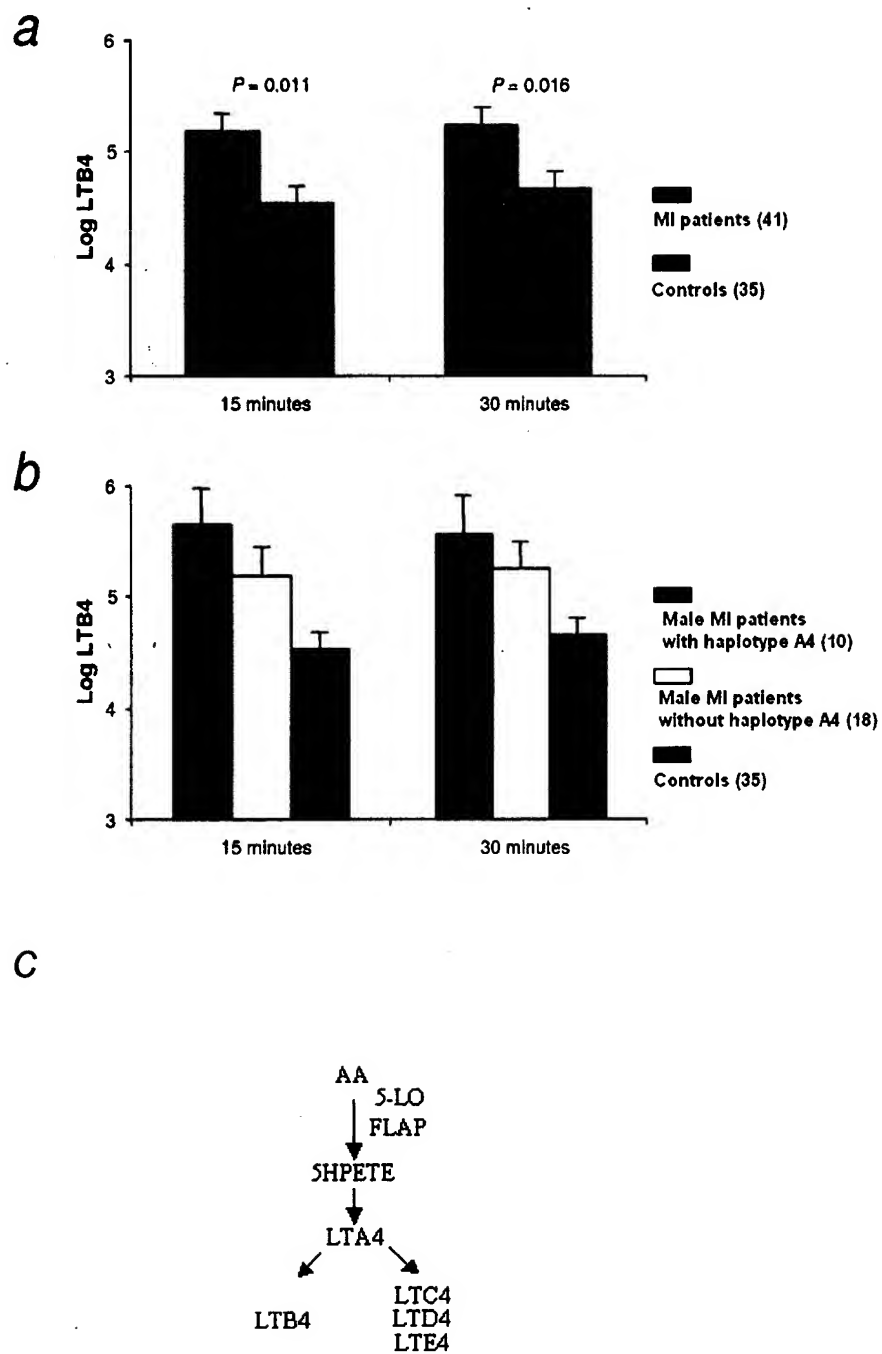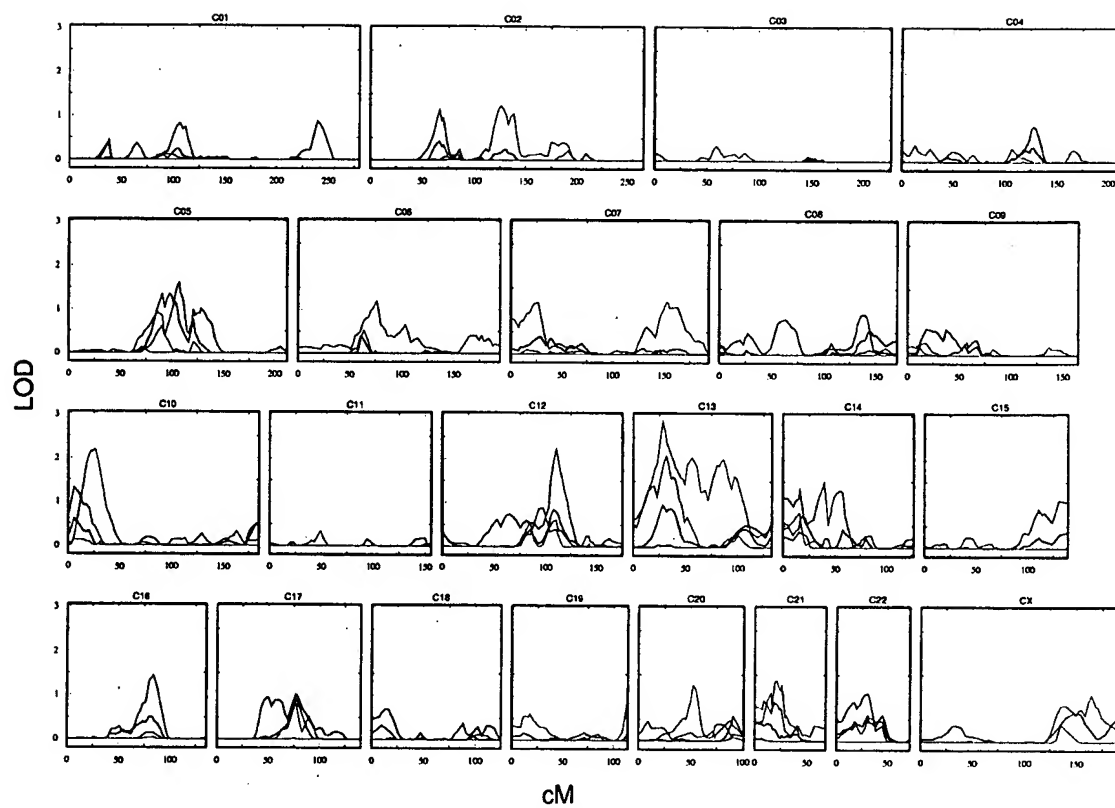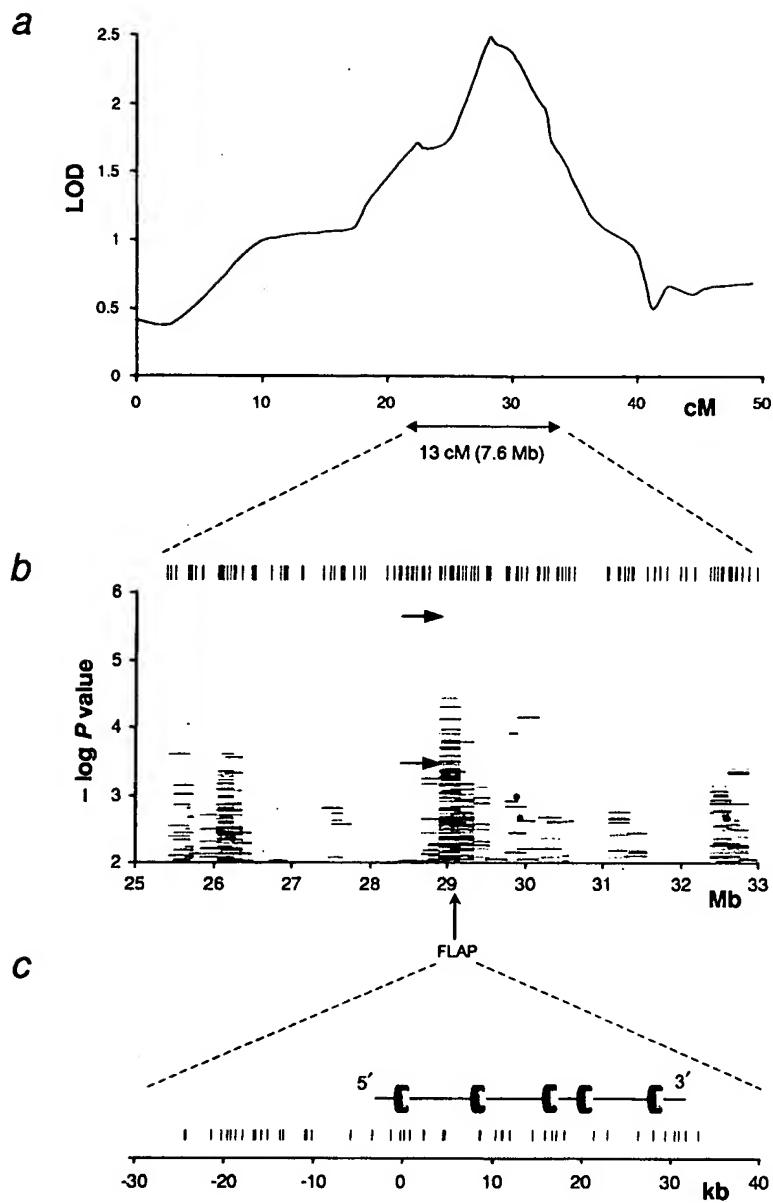
FIG. 9

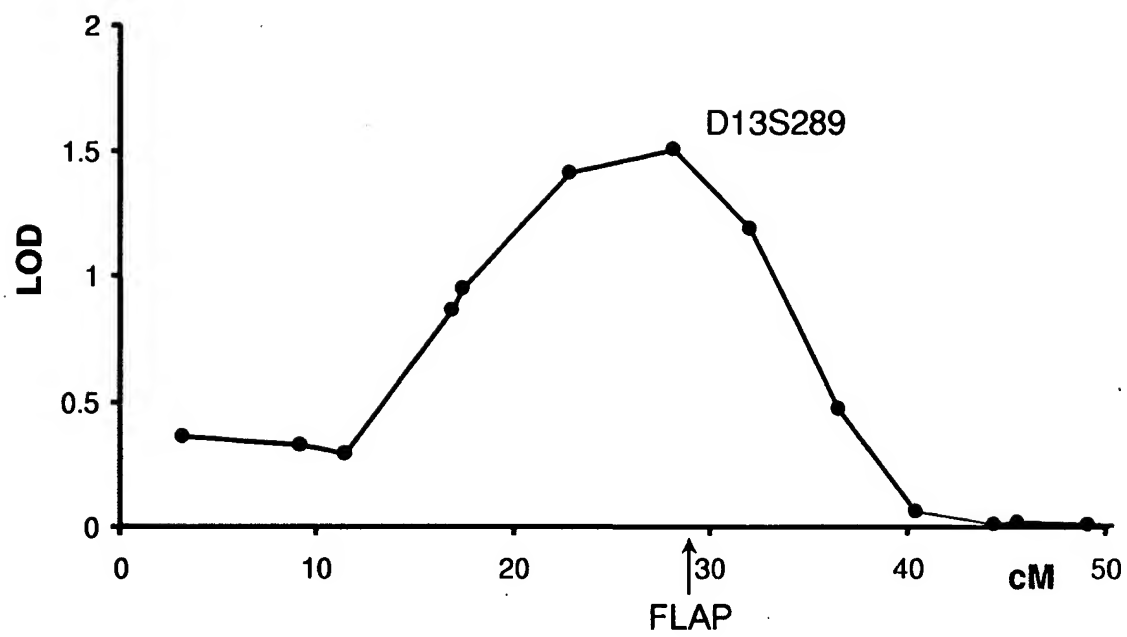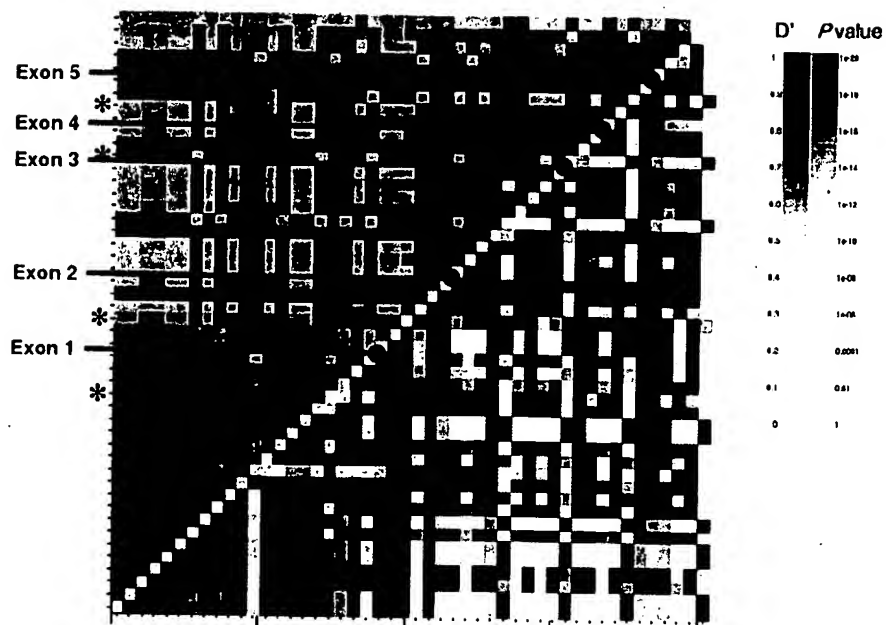**Figure 10**

FIG. 10

FIG. 11

FIG. 12

FIG. 13

FIG. 14

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